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Attorneys for Federal Defendants

UNITED STATES DISTRICT COURT

DISTRICT OF OREGON

NORTHWEST ENVIRONMENTAL  
ADVOCATES, a non-profit corporation,

Civ. No. 05-1876-HA

Plaintiff,

v.

UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY, NATIONAL  
MARINE FISHERIES SERVICE, and  
UNITED STATES FISH AND WILDLIFE  
SERVICE,

Defendants.

UNITED STATES' NOTICE OF FILING  
NMFS'S AMENDED  
ADMINISTRATIVE RECORD AND  
INDEX PURSUANT TO OCTOBER 21  
AND 23, 2009 ORDERS

Pursuant to the Court's October 21 and 23, 2009 Order (Docket Nos. 193 and 196), notice is provided to the Court and the parties that the United States is hereby filing the Certification of Amended Administrative Record for National Marine Fisheries Service ("NMFS"), along with the index for the record. The certification and index are attached hereto as Attachment A.

Pursuant to Local Civil Rule 100.4(f), NMFS's amended administrative record will not be filed using the Court's Electronic Case Filing system. Accordingly, notice also is provided that, on November 20, 2009, the United States is sending for filing with this Court a disc that contains NMFS's amended administrative record. The United States also is sending a courtesy copy of the disc for Judge Haggerty's chambers. Copies of the disc also are being sent today to counsel identified on the Certificate of Service.<sup>2</sup>

Respectfully submitted,

IGNACIA S. MORENO  
Assistant Attorney General  
Environment & Natural Resources Division

/s/ Meredith L. Flax  
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<sup>2</sup> For the convenience of the Court and the parties, the discs being sent today contain electronic copies of all of the documents contained in NMFS's administrative record, including the documents that were added to the record pursuant to the Court's October 21 and 23, 2009 Orders (Docket Nos. 193 and 196) and the documents that were contained in NMFS's previous record filings. The discs also contain a few additions to the NMFS index consistent with a Freedom of Information Act appeal. NMFS notified Plaintiff's counsel of these additions in an e-mail on November 17, 2009.

E-mail: [mark.nieczynski@usdoj.gov](mailto:mark.nieczynski@usdoj.gov)

Attorneys for United States of America

Dated: November 20, 2009

**CERTIFICATE OF SERVICE**

I hereby certify that on November 20, 2009, I caused a true copy of the foregoing UNITED STATES' NOTICE OF FILING NMFS'S AMENDED ADMINISTRATIVE RECORD AND INDEX PURSUANT TO OCTOBER 21 AND 23, 2009 ORDERS (with attachment) to be served on each of the following counsel in the manner indicated below:

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/s/ Meredith L. Flax  
MEREDITH L. FLAX

# ATTACHMENT A

U.S. DEPARTMENT OF COMMERCE

Form CD-64  
(Revised)  
Prescribed by  
DAO 201.17

Portland, Oregon  
November 05, 2009

I HEREBY CERTIFY that the annexed is a true copy of the fourth amended administrative record, prepared in accordance with the Court's Orders of October 21, 2009 and October 23, 2009, for the Biological Opinion on EPA's Proposed Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods (February 23, 2004), on file in the Oregon State Habitat Office of the Habitat Conservation Division, National Marine Fisheries Service, 1201 Lloyd Boulevard, Suite 1100, Portland, OR 97232.

Kim Kratz



State Director  
Oregon State Habitat Office  
Habitat Conservation Division  
National Marine Fisheries Service,  
Northwest Region

I HEREBY CERTIFY that Kim Kratz, who signed the foregoing certificate, is now and was at the time of signing, a custodian of records, National Marine Fisheries Service, Northwest Region, Habitat Conservation Division, Oregon State Habitat Office, Portland, Oregon, and that full faith and credit should be given to his certificate as such.

IN WITNESS WHEREOF, I have hereunto subscribed my name, and caused the seal of the Department of Commerce to be affixed this fifth day of November two thousand nine.

For the SECRETARY OF COMMERCE:



Certifying Officer

Barry Thom  
Acting Regional Administrator  
National Marine Fisheries Service  
Northwest Region

SEAL

USCOMM-DC 1359-P71

**INDEX TO THE FOURTH AMENDED ADMINISTRATIVE RECORD**

**For National Marine Fisheries Service's February 24, 2004, Biological Opinion on EPA's Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen and Antidegradation Implementation Methods, Including Index for Temperature Guidance Project**

**November 6, 2009**

**Northwest Environmental Advocates v. U.S. EPA et al., Civ. No. 05-1876 HA**

**Biological Opinion Records**

\*Record added in 2008    \*\*Record added in May 2009    \*\*\*Record added in November 2009

**A. NMFS Documents**

<b>NO.</b>	<b>Date</b>	<b>Description</b>
1.	02/23/2004	Letter to Randall F. Smith, EPA from D. Robert Lohn, NMFS, Subject: Biological Opinion on EPA's Proposed Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods.
2.	02/23/2004	Endangered Species Act – Section 7 Consultation Biological Opinion & Magnuson Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation: EPA's Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods, February 23, 2004.
2a.	02/17/2004	Draft passages on amount or extent of take for draft biological opinion (unidentified author).**
2b.	02/13/2004	Draft Letter to Randall F. Smith, EPA from D. Robert Lohn, NMFS, Re: Biological Opinion on EPA's Proposed Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods.***
3.	02/10/2004	Draft Biological Opinion on EPA's Proposed Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods [2003/01568 (ESA) & 2004/00087 (EFH)].
4.	02/10/2004	E-mail to Dru Keenan, EPA, and John Palmer, EPA, from Jeffrey Lockwood, NMFS, Subject: Draft biological opinion.*
5.	02/10/2004	February 10, 2004 draft biological opinion, redline/strikeout version.*
5a.	02/09/2004	Draft section on Integration and Synthesis of Effects for draft biological opinion, by Jeffrey Lockwood.**
5b.	02/05/2004	Draft Letter to Randall F. Smith, EPA from D. Robert Lohn, NMFS, Re: Biological Opinion on EPA's Proposed Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods (draft biological opinion transmittal letter).**  Att. 1: Endangered Species Act - Section 7 Consultation Biological Opinion & Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation: EPA's Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods (draft of biological opinion with staff comments).  Redacted: See Excluded Document No. 25.
6.	02/04/2004	E-mail to Robert C. Anderson, NMFS, from Chris Mebane, NMFS, Subject: Reference for ODEQ temperature data.  Att. 1: 16v18doc (Comparison of continuous-temperature data and temperature modeling with proposed Oregon "colder-water" salmon and steelhead trout rearing" beneficial use designations).
6a.	02/02/2004	Draft Letter to Randall F. Smith, EPA from D. Robert Lohn, NMFS, Re: Biological Opinion on EPA's Proposed Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods (draft biological opinion transmittal letter).**  Att. 1: Endangered Species Act - Section 7 Consultation Biological Opinion & Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation: EPA's Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods (draft of biological opinion with staff comments).  Redacted: See Excluded Document No. 26.
7.	01/29/2004	E-mail to Jeff Lockwood, NMFS, from Mark Charles, DEQ, Subject: DEQ Temperature Letter No. 2 (pertains to draft of February 4, 2004 letter from Michael Llewelyn, DEQ, to Randy Smith, EPA).

NO.	Date	Description
8.	01/29/2004	E-mail to Mark Charles, DEQ, Mary Lou Soscia, EPA, Adrienne Allen, EPA, Cara Lalley, EPA, Danielle Tillman, EPA, Dru Keenan, EPA, Elizabeth Materna, EPA, Jeff Lockwood, NMFS, John Hocjeimer, Tetrattech, John Palmer, EPA, Keith Cohon, EPA, Kellie Kubena, EPA, Maryellen Levine, EPA, Mindy Gampel, EPA, Mark Morris, EPA, Melanie Rowland, NOAA GCNW, Paula Vanhaagen, EPA, Robert C. Anderson, NMFS, Stephanie Thornton, EPA, Steve Ellis, Tetrattech, Debra Sturdevant, DEQ, Ralph Stephen, EPA, Ted Buerger, FWS, Tom Townsend, EPA, Tonya Fish, EPA, William Bogue, EPA, and Nancy Wilson, EPA, from Jeff Lockwood, NMFS, Subject: DEQ Temperature Letter No. 2 (pertains to draft of February 4, 2004 letter from Michael Llewelyn, DEQ, to Randy Smith, EPA).
8a.	01/25/2004	Draft section of biological opinion re "Intergravel Dissolved Oxygen OAR 340-041-0016(1)(a)(C)" (unidentified author).**
9.	01/13/2004	E-mail to John Palmer, EPA, Dru Keenan, EPA, Mary Lou Soscia, EPA, Cathy Tortorici, NMFS, Jeffrey Lockwood, NMFS, and Debra Sturdevant, DEQ, from Robert C. Anderson, NMFS, Subject: Conservation Measures.*
9a.	12/30/2003	Draft Letter to Randall F. Smith, EPA from D. Robert Lohn, NMFS, Re: Biological Opinion on EPA's Proposed Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antigradation Implementation Methods (draft biological opinion transmittal letter).**  Redacted: see Excluded Document No. 30.
9b.	12/29/2003	E-mail from Jeff Lockwood, NMFS, to John Palmer, EPA, cc: Dru Keenan, EPA, Elizabeth Materna, EPA, Robert C. Anderson, NMFS, and Marylou Soscia, EPA, Subject: Re: BE - What to expect, discussing initiation of consultation.***
10.	12/02/2003	E-mail to Mark Charles, DEQ and Debra Sturdevant, DEQ, from Jeffrey Lockwood, NMFS, Subject: Preliminary Draft List of Issues for DEQ Implementation Letter.*  Att. 1: Provisions Needing Clarification or Interpretation in DEQ Implementation Letter, Jeff Lockwood, NMFS, December 2, 2003 (Preliminary Draft).
11.	11/20/2003	E-mail to Debra Sturdevant, ODEQ, from Jeffrey Lockwood, NMFS, Subject: issue or clarification – protecting cold water.
12.	11/19/2003	E-mail to Jeff Lockwood, NMFS, from Dan Gambetta, NMFS, Subject: IGDO paper analysis.
13.	11/18/2003	E-mail to Jeff Lockwood, NMFS, from Dan Gambetta, NMFS, Subject: thermal shock.
14.	11/14/2003	Recent Summer Maximum Temperature Observations and Proposed ODEQ Summer Maximum Temperature Criteria (Western Oregon).*
15.	11/14/2003	E-mail to Debra Sturdevant, DEQ, from Jeffrey Lockwood, NMFS, Subject: Re: thermal shock provision - DEQ draft rule of 11/6/03.*  Att. 1: Thermal Shock.
16.	11/13/2003	E-mail to Jeffrey Lockwood, NMFS, from Debra Sturdevant, DEQ, Subject: RE: thermal shock provision - DEQ draft rule of 11/6/03.*
17.	11/07/2003	E-mail to Dru Keenan, EPA, and Jeffrey Lockwood, NMFS, from Debra Sturdevant, DEQ, Subject: RE: and or or?*
18.	11/06/2003	E-mail to Dru Keenan, EPA from Jeffrey Lockwood, NMFS, Subject: Re: thermal shock provision - DEQ draft rule of 11/6/03.*  Att. 1: Thermal Shock.
19.	11/06/2003	E-mail to Dru Keenan, EPA, and Debra Sturdevant, DEQ, from Jeffrey Lockwood, NMFS, Subject: thermal shock provision - DEQ draft rule of 11/6/03.*
20.	11/05/2003	E-mail to Jeffrey Lockwood, NMFS, from James Ruff, NMFS, Subject: Re: Review of EPA proposed temperature rule.*
21.	11/04/2003	E-mail to Debra Sturdevant, DEQ, from Jeffrey Lockwood, NMFS, Subject: Re: Conference call for Map Issues.*
22.	11/03/2003	E-mail to Dru Keenan, EPA, from Jeffrey Lockwood, NMFS, Subject: Re: Notes from 10/28 Meeting - Key Unresolved Issues.*
23.	11/03/2003	E-mail to Debra Sturdevant, DEQ, from Jeffrey Lockwood, NMFS, Subject: Re: Ecotrust Data.*
24.	11/03/2003	E-mail to Debra Sturdevant, DEQ, Robert C. Anderson, NMFS, Dru Keenan, EPA, Elizabeth Materna, FWS, John Palmer, EPA, and Chris Mebane, NMFS, Subject: P.S. the citation.*
25.	11/03/2003	E-mail to Debra Sturdevant, DEQ, from Jeffrey Lockwood, NMFS, Subject: Re: on another topic - winter cold water.*
26.	10/31/2003	SR Chinook Spawning Data - 1993-2002.*
27.	10/29/2003	E-mail to Jeffrey Lockwood, NMFS, John Palmer, EPA, Elizabeth Materna, FWS, Dru Keenan, EPA, Debra Sturdevant, DEQ, and Chris Mebane, NMFS, from Robert C. Anderson, NMFS, Subject: Snake River Spawning Criterion.*



NO.	Date	Description
28.	10/28/2003	E-mail to Dru Keenan, EPA, from Chris Mebane, NMFS, Subject: Round 2 temperature analysis basins.*  Att. 1: Recent Summer Maximum Temperature Observations and Proposed ODEQ Summer Maximum Temperature Criteria (selected basins which had little or no "colder" (16°C) designations).
29.	10/28/2003	E-mail to Dru Keenan, EPA, from Chris Mebane, NMFS, Subject: Temperature analysis, Hood and Sandy.*  Att. 1: Recent Summer Maximum Temperature Observations and Proposed ODEQ Summer Maximum Temperature Criteria (Hood and Sandy Basins).
30.	10/27/2003	E-mail to Debra Sturdevant, DEQ, from Jeffrey Lockwood, NMFS, Subject: FINAL notes from 10/14 where & when.*  Att. 1: Meeting Notes for October 14, 2003 Beneficial Use Group.
31.	10/24/2003	E-mail to Dru Keenan, EPA, John Palmer, EPA, Debra Sturdevant, DEQ, Cedric Cooney, ODFW, Rick Kepler, ODFW, Elizabeth Materna, FWS, Steve Ralph, EPA, Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, Tracy Harrison, DEQ, Bill Bogue, EPA, and Emily Smith, DEQ, from Chris Mebane, NMFS, Subject: Temperature analysis, round 2.* Missing attached zip data file.
32.	10/24/2003	E-mail to Jeffrey Lockwood, NMFS, Debra Sturdevant, DEQ, and Ritchie Graves, NMFS, from Chris Mebane, NMFS, Subject: Fall chinook spawning/incub temperature designation.*  Att. 1: Connor, W. P., C. E. Piston, and A. P. Garcia. 2003. Temperature during incubation as one factor affecting the distribution of Snake River fall chinook salmon spawning. Transactions of the American Fisheries Society 132:1236-1243.
33.	10/17/2003	E-mail to Robb Keller, DEQ, from Chris Mebane, NMFS, Subject: Temperature data - need locational info.*
34.	10/14/2003	Meeting Notes for October 14, 2003 Beneficial Use Group.*
34a.	10/03/2003	Comparison of continuous-temperature data and temperature modeling with proposed Oregon "colder-water salmon and steelhead trout rearing" beneficial use designations [with six zip map files].**
35.	10/02/2003	Recent Summer Maximum Temperature Observations and Proposed ODEQ Summer Maximum Temperature Criteria (Western Oregon).*
36.	10/02/2003	Letter to Michael T. Llewelyn, ODEQ, (Attn. Emily Smith), from Michael Tehan, NMFS, Subject: Comments on Draft Proposed Revisions to the Oregon Water Quality Criteria for Temperature and Intergravel Dissolved Oxygen, and Antidegradation Provisions.
37.	10/02/2003	E-mail to Jeffrey Lockwood, NMFS, cc: Robert C. Anderson, NMFS, from Chris Mebane, NMFS, discussing preliminary review of data re Wa/Or streams w/summer max <=16 but designated >16C. [Moved here from Excluded Documents Index.]  Att. 1: Recent Summer Maximum Temperature Observations and Proposed ODEQ Summer Maximum Temperature Criteria (Western Oregon), October 2, 2003.
37a.	09/26/2003	Draft of Letter to Michael T. Llewelyn, ODEQ, from Michael Tehan, NMFS, Subject: Comments on Draft Proposed Revisions to the Oregon Water Quality Criteria for Temperature and Intergravel Dissolved Oxygen, and Antidegradation Provisions.***
37b.	09/10/2003	E-mail to Dru Keenan, EPA, John Palmer, EPA, cc: Robert C. Anderson, and Chris Mebane, NMFS, from Jeffrey Lockwood, NMFS, discussing draft beneficial use designations and application to specific basins.***
38.	08/01/2003	E-mail to Dru Keenan, EPA, from Jeffrey Lockwood, NMFS, Subject: Re: Meeting notes from Conference call 7.30.03.*  Att. 1: Notes from Where & When Conference Call July 30, 2003 (redline).
39.	08/01/2003	E-mail to Tracy Harrison, DEQ, Chris Mebane, NMFS, John Palmer, EPA, Debra Sturdevant, DEQ, Emily Smith, DEQ, William Bogue, EPA, Dru Keenan, EPA, Robert C. Anderson, NMFS, Rick Kepler, ODFW, Elizabeth Materna, FWS, from Jeffrey Lockwood, NMFS, Subject: Re: Williamette Run Timing.*
40.	07/30/2003	E-mail to Tracy Harrison, DEQ, from Jeffrey Lockwood, NMFS, Subject: Williamette Run Timing.*
40a.	07/22/2003	E-mail reply to Chris Mebane, NMFS, cc: Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: temps during spawning time - Revised decision rules for salmonid spawning.**  Redacted: See Excluded Document No. 48.
40b.	07/02/2003	Draft section of biological opinion: Biological Information and Critical Habitat, July 2, 2003 draft by R. Anderson [Species BRT.wpd].**
40c.	07/02/2003	Draft section of biological opinion: Draft of Status of Species, July 2, 2003 draft by R. Anderson [Species.wpd].**
40d.	07/02/2003	Draft section of biological opinion: Draft of Status of Species, July 2, 2003 draft by R. Anderson [Species Status.wpd].**

NO.	Date	Description
40e.	07/02/2003	Draft section of biological opinion: Environmental Baseline, July 2, 2003 draft by R. Anderson [Oregon Baseline.wpd].**
40f.	07/02/2003	Draft section of biological opinion: Environmental Baseline, July 2, 2003 draft by R. Anderson [SW Oregon Baseline.wpd].**
40g.	07/02/2003	Draft section of biological opinion: Environmental Baseline (Columbia River Basin), July 2, 2003 draft by J. Lockwood.**
40h.	07/02/2003	Draft section of biological opinion: Environmental Baseline, July 2, 2003 draft by R. Anderson [Oregon State Baseline.wpd].**
41.	06/25/2003	Proposed Decision Rules (DRAFT revised 6/25/03 by Jeff Lockwood).*
42.	06/25/2003	Proposed Decision Rules (DRAFT revised 6/25/03 by Jeff Lockwood - redline).*
43.	06/19/2003	E-mail to Mary Lou Soscia, EPA, from James Ruff, NMFS, Subject: [Fwd: [Fwd:Columbia River Spawning]].*
44.	06/10/2003	Spring Chinook - Upper Grand Ronde (17060104).*
45.	08/16/2002	Agenda - Cold Water Refugia Meeting, August 16, 2002.*
46.	08/02/2002	Memorandum to Chris Torgersen, USGS, from Jeffrey Lockwood, NMFS, Subject: Request for presentation.*
47.	06/13/2002	E-mail to Jeffrey Lockwood, NMFS, from Russ Strach, NMFS, Subject: per your request.*
48.	[undated]	Figure - Temperature of Outflows at Hells Canyon Dam (current habitat) and Swan Falls Dam (historic habitat - Marsing Reach).*

**B. EPA Documents**

NO.	Date	Description
49.	02/04/2004	Letter to Michael Tehan, NMFS, and Kemper McMaster, USFWS, from Randall Smith, EPA, Subject: Transmittal of Biological Evaluation of the Revised Oregon Water Quality Standards.  Att. 1: Biological Evaluation of the Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation, Amended Final, prepared for USFWS and NMFS by EPA, Region 10 [See State of Oregon Document Section E (Document numbers 176-179) of this index for color versions of maps included in Appendix B].
50.	01/29/2004	E-mail to Jeffrey Lockwood, NMFS, from Mary Lou Soscia, EPA, Re: The DEQ Letter.
51.	01/09/2004	Letter to Michael Tehan, NMFS, and Kemper McMaster, USFWS, from Randall Smith, Subject: Transmittal of 12/16/03 Biological Evaluation of the Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation.  Att. 1: Biological Evaluation of the Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation prepared for USFWS and NMFS by EPA, Region 10 December 19, 2003.
52.	12/16/2003	E-mail to John Palmer, EPA, from Elizabeth Materna, FWS, Subject: Re: Oregon Clarification Letter.*
53.	12/15/2003	E-mail to Elizabeth Materna, FWS, Jeffrey Lockwood, NMFS, Rob+G255ert C. Anderson, NMFS, Jeff Kopf, EPA, John Palmer, EPA, Mary Lou Soscia, EPA, and Kellie Kubena, EPA, from Dru Keenan, EPA, seeking review and comment re draft conservation measures. Att. 1: 12/15/03 Re-draft of Conservation Measures, draft section of biological opinion+B266.**
54.	11/06/2003	E-mail to Jeffrey Lockwood, NMFS, from Dru Keenan, EPA, Subject: thermal shock provision – DEQ draft rule of 11/6/03.
55.	11/06/2003	E-mail to Jeffrey Lockwood, NMFS, from Dru Keenan, EPA, Subject: Re: and or?*
56.	11/03/2003	E-mail to Adrienne Allen, EPA, from Mark Charles, DEQ, Subject: RE: variance language.*
57.	10/31/2003	E-mail to John Palmer, EPA, Debra Sturdevant, DEQ, Jeffrey Lockwood, NMFS, and Elizabeth Materna, FWS, from Dru Keenan, EPA, Subject: Notes from 10/28 Meeting - Key Unresolved Issues.*  Missing Attachment: [Att. 1: Draft Meeting Notes from Where & When Meeting October 28, 2003].
58.	10/10/2003	Environmental Protection Agency Proposed Rule and Preamble: Water Quality Standards for Oregon, 40 CFR Part 131; <a href="http://www.epa.gov/fedrgstr/EPA-WATER/2003/October/Day-10/w25525.htm">http://www.epa.gov/fedrgstr/EPA-WATER/2003/October/Day-10/w25525.htm</a> .

NO.	Date	Description
59.	10/03/2003	Letter to Michael Llewelyn, DEQ, from Randall Smith, EPA, Subject: Comments on Oregon's Proposed Revisions to OAR Division 41, Water Quality Standards: Beneficial Uses, Policies and Criteria for Oregon.
60.	09/11/2003	E-mail to Dru Keenan, EPA, from John Palmer, EPA, Subject: Re: preamble - steelhead smoltification.*
61.	08/06/2003	E-mail to Dru Keenan, EPA, Chris Mebane, NMFS, Elizabeth Materna, FWS, Emily Smith, DEQ, Tracy Harrison, DEQ, Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, Debra, Sturdevant, DEQ, William Bogue, EPA, and Stephen Ralph, EPA, from John Palmer, EPA, Subject: Final Draft of Where/When Decision Rules.*  Att. 1: Final Draft of Decision Rules to Designate Pacific Salmon and Bull Trout Beneficial Uses in Oregon 8/6/03.
61a.	08/06/2003	Map re Proposed 2003 Oregon Critical Period Fish Use Designations and Listed Steelhead Populations (non-extirpated) within the Interior Columbia Basin ESUs, by NOAA Fisheries (preliminary proposal of fish use designations).**
62.	07/30/2003	E-mail to Elizabeth Materna, FWS, Robert C. Anderson, NMFS, Jeffrey Lockwood, NMFS, Chris Mebane, NMFS, Debra Sturdevant, DEQ, Tracy Harrison, DEQ, Emily Smith, DEQ, and John Palmer, EPA, from Dru Keenan, EPA, Subject: spawning rules II.*  Att. 1: Draft 7/30/03 version 2 Spawning Rules.
63.	07/30/2003	E-mail to Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, Debra Sturdevant, DEQ, Chris Mebane, NMFS, and Elizabeth Materna, FWS, from Dru Keenan, EPA, Subject: spawning rules.*  Att. 1: Draft 7/30/03 Spawning Rules.
64.	07/30/2003	Notes from Where & When Conference Call July 30, 2003.*
65.	07/29/2003	E-mail to Mark Charles, DEQ, and Jeffrey Lockwood, NMFS, from Keith Cohon, EPA, [No Subject].*
66.	07/23/2003	E-mail to Chris Mebane, NMFS, from John Palmer, EPA, Subject: Re: New Spawning Proposal!!!!!!*
67.	07/11/2003	E-mail to Cedric Cooney, ODFW, Chris Mebane, NMFS, Debra Sturdevant, DEQ, Dru Keenan, EPA, Elizabeth Materna, FWS, Emily Smith, DEQ, Jeffrey Lockwood, NMFS, John Palmer, EPA, Marilyn Fonseca, DEQ, Rick Kepler, ODFW, Robert C. Anderson, NMFS, Stephen Ralph, EPA, Tracy Harrison, DEQ, William Bogue, EPA, and Steve Ellis, EPA, from Dru Keenan, EPA, Subject: Decision Rules Justification/Assumptions - to date.*  Att. 1: Decision Rule Assumptions to date (7/11/03).
68.	06/27/2003	E-mail to Cedric Cooney, ODFW, Chris Mebane, NMFS, Debra Sturdevant, DEQ, Dru Keenan, EPA, Elizabeth Materna, FWS, Emily Smith, DEQ, Jeffrey Lockwood, NMFS, John Palmer, EPA, Marilyn Fonseca, DEQ, Rick Kepler, ODFW, Robert C. Anderson, NMFS, Stephen Ralph, EPA, Tracy Harrison, DEQ, and William Bogue, EPA, from Dru Keenan, EPA, Subject: Revised Decision Rules.*  Att. 1: Decision Rules for Mapping Salmonid Uses 6/27/03 Revision.
69.	06/18/2003	E-mail to Cedric Cooney, ODFW, Chris Mebane, NMFS, Debra Sturdevant, DEQ, Dru Keenan, EPA, Elizabeth Materna, FWS, Emily Smith, DEQ, Jeffrey Lockwood, NMFS, John Palmer, EPA, Marilyn, Fonseca, DEQ, Rick Kepler, ODFW, Robert C. Anderson, NMFS, Stephen Ralph, EPA, Tracy Harrison, DEQ, and William Bogue, EPA, from Dru Keenan, EPA, Subject: Revised Decision Rules for Where & When.*  Att. 1: Proposed Decision Rules (Revised 6/18/03).
70.	06/13/2003	E-mail to Cedric Cooney, ODFW, Chris Mebane, NMFS, Debra Sturdevant, DEQ, Dru Keenan, EPA, Elizabeth Materna, FWS, Emily Smith, DEQ, Jeffrey Lockwood, NMFS, John Palmer, EPA, Marilyn, Fonseca, DEQ, Rick Kepler, ODFW, Robert C. Anderson, NMFS, Stephen Ralph, EPA, Tracy Harrison, DEQ, and William Bogue, EPA, from Dru Keenan, EPA, Subject: Mtg Notes PLEASE REVIEW.*  Att. 1: Where and When Workgroup Meeting Notes for June 10th & 11th - June 12, 2003.

NO.	Date	Description
71.	06/09/2003	E-mail to Jeffrey Lockwood, NMFS, from Mary Lou Soscia, EPA, Subject: Columbia River Spawning.*  Att. 1: Letter to Scott Bettin, BPA, Tony Norris, BOR, Rudd Turner, COE, from Raymond Boyce, ODFW, and David Wills, FWS, Subject: Reduction of Chum and Chinook Protection Flows.
72.	05/30/2003	E-mail to Robert C. Anderson, NMFS, Chris Mebane, NMFS, Debra Sturdevant, DEQ, Marilyn Fonseca, DEQ, Cedric Cooney, ODFW, Rick Kepler, ODFW, Jeffrey Lockwood, NMFS, Elizabeth Materna, FWS, Stephen Ralph, EPA, John Palmer, EPA, from Dru Keenan, EPA, Subject: Where & When Meeting Notes.*  Att. 1: Where and When Workgroup Meeting May 27th & May 28th Meeting Notes. Att. 2: Notes from Where & When Conference Call July 30, 2003.
73.	05/21/2003	E-mail to Jeffrey Lockwood, NMFS, Dru Keenan, EPA, Chris Mebane, NMFS, Robert C. Anderson, NMFS, Stephen Ralph, EPA, Elizabeth Materna, FWS, Rick Kepler, ODFW, and Cedric Cooney, ODFW, from John Palmer, EPA, Subject: Agenda for Where/When Mtg 5/27-28.*  Att. 1: Draft Agenda Where and When Workgroup Meeting May 27th & May 28th. Att. 2: Trail Map for Use Designations 5/16/03 Draft. Att. 3: Options/Recommendations for Oregon WQS revisions to meet the Court Order Working Draft 5/13/03. Att. 4: Inventory of Life Stage Distribution and Timing Data.
74.	05/16/2003	Trail Map for Use Designations.*
75.	05/09/2003	Draft Temperature Standard Options.*
76.	05/06/2003	Options/Recommendations for Oregon Temperature WQS revisions to meet the Court Order (draft).*

**C. Other Documents**

NO.	Date	Description
77.	02/24/2004	Letter to Randy Smith, EPA, from Olney Patt, Jr., CRFITS, Subject: Concerns regarding ongoing Oregon Water Quality Standards review process.  Attachment A: Technical Comments and Concerns.
78.	02/24/2004	Fax to Jeff Lockwood, NMFS, Michael Tehan, NMFS, Cathy Tortorici, NMFS, Robert C. Anderson, NMFS, Ritchie Graves, NMFS, Brian Brown, NMFS, D. Anderson, NMFS, and Gary Sims, NMFS from Greg Haller, Nez Perce Water Resources Division, Subject: Letter to EPA.
79.	02/10/2004	Letter to Randy Smith, EPA, and Michael Crouse, NMFS, from Melissa Powers and Stephanie Parent, Pacific Environmental Advocacy Center, Subject: Deficiencies in Oregon's recent water quality standards revision process.
80.	08/29/2003	Letter to Mike Llewellyn, DEQ, from William H. Burke, Confederated Tribes of the Umatilla Indian Reservation Tribal Water Commission, Subject: Comments on the Proposed Changes to Water Quality Standards, OAR 340-041 and related matters.
81.	08/05/2003	Ecotrust. Notes from T.C. Dewberry concerning the salmon anchor habitat surveys.*
82.	07/22/2003	E-mail to Jeffrey Lockwood, NMFS, and Mary Lou Soscia, EPA, from Ed Backus, Ecotrust, Subject: RE: Questions on Ecotrust for Anchor Habitat Report.*  Att. 1: Brief Description of Field Technique. Att. 2: Method and Justification for Whole-basin Snorkel Counts.
83.	07/22/2003	E-mail to Jeffrey Lockwood, NMFS, and Mary Lou Soscia, EPA, from Ed Backus, Ecotrust, Subject: RE: Questions on Ecotrust for Anchor Habitat Report.*
84.	06/19/2003	John Day Salmonid Beneficial Use Table (6/19/03).*

**D. Scientific Literature**

NO.	Date	Description
85.	1995	Botkin, D., K. Cummins, T. Dunne, H. Regier, M. Sobel, and L. Talt. 1995. Status and future of salmon of western Oregon and northern California: Findings and options. Report #8. The Center for the Study of the Environment, Santa Barbara, California. <a href="http://www.naturestudy.org/services/publica.htm">http://www.naturestudy.org/services/publica.htm</a> .
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87.	1996	Busby, P. J., T. C. Wainwright, G. J. Bryant, L. Leirheimer, R. S. Waples, F. W. Waknitz, and I. V. Lagomarsino. 1996. Status review of west coast steelhead from Washington, Idaho, Oregon, and California. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-NWFSC-27. 281 p.
88.	1985	Carson, K.A. 1985. A model of salmonid egg respiration. M.S. thesis. Agricultural and Chemical Engineering Department, Colorado State University, Fort Collins. 108 p.
89.	1987	Chapman, D.W. and K.P. McLeod. 1987. Development of criteria for fine sediment in the Northern Rockies ecoregion. Final Report. EPA contract no. 68-01-6986.
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91.	1961	Coble, D.W. 1961. Influence of water exchange and dissolved oxygen on survival of steelhead trout embryos. Trans. Am. Fish. Soc. 90(4):469-474.
92.	2002	Cooney, T.D. 2002. UCR steelhead and spring chinook salmon quantitative analysis report. Part 1: Run reconstructions and preliminary assessment of extinction risk. National Marine Fisheries Service, Hydro Program, Technical Review Draft, Portland, Oregon.
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94.	2003	Dewberry, T.C. 2003. Development and application of anchor habitat approaches to salmon conservation: A synthesis of data and observation from the Siuslaw watershed, coastal Oregon. Unpublished draft report. Portland, Oregon. 16 p. July.
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97.	2000	Ecotrust, Oregon Trout, and The Wild Salmon Center. 2000. A Salmon Anchor Habitat Strategy for the Tillamook and Clatsop State Forests. Updated Version, March 2001. Portland, Oregon. 29 p. plus appendices.
98.	2003	EPA (Environmental Protection Agency). 2003. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. U.S. Environmental Protection Agency, Region 10, Office of Water, Seattle, WA. 49 p. <a href="http://www.epa.gov/r10earth/temperature.htm">www.epa.gov/r10earth/temperature.htm</a> .
99.	1895	Evermann, B.W. 1895. A preliminary report upon salmon investigations in Idaho in 1894. U.S. Fish Commission Bulletin 15:253-284.
100.	1993	FEMAT (Forest Ecosystem Management Assessment Team). 1993. Forest ecosystem management; and ecological, economic, and social assessment. Report of the Forest Ecosystem Management Assessment Team. U.S. Government Printing Office 1993-793-071. U.S. Government Printing Office for the U.S.D.A. Forest Service; U.S. Department of Interior, Fish and Wildlife Service, Bureau of Land Management, and National Park Service; U.S. Department of Commerce, National Oceanic and Atmospheric Administration and National Marine Fisheries Service; and the U.S. Environmental Protection Agency.
101.	2003	Fish Passage Center. 2003. Fish Passage Center annual report-2002. Fish Passage Center, Columbia River Basin Fish and Wildlife Authority, Portland, OR.
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103.	1970	Fulton, L.A. 1970. Spawning areas and abundance of steelhead trout and coho, sockeye, and chum salmon in the Columbia River basin-past and present. U.S. Fish and Wildlife Service, Special Scientific Report, Fisheries 618.
104.	1987	Hassler, T.J. 1987. Species profiles: Life histories and environmental requirements of coastal fishes and invertebrates (Pacific Southwest) – coho salmon. U.S. Fish Wildl. Serv. Biol. Rep. 82(11.70). U.S. Army Corps of Engineers, TR EL-82-4. 19 p. <a href="http://www.nwrc.usgs.gov/wdb/pub/0132.pdf">http://www.nwrc.usgs.gov/wdb/pub/0132.pdf</a> .
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139.	2001	Poole, G.C., and C. Berman. 2001. An ecological perspective on in-stream temperature: natural heat dynamics and mechanisms of human-caused thermal degradation. Environmental Management 27(6):787-802.
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NO.	Date	Description
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#### E. State of Oregon Documents

NO.	Date	Description
164.	02/04/2004	Letter to Randy Smith, EPA, from Michael T. Llewelyn, DEQ, Subject: Oregon Responses to EPA, Questions, Subject: State's Water Quality Temperature Standards.
165.	12/10/2003	Letter to John Iani, EPA, from Stephanie Hallock, DEQ, Subject: Oregon Submission of Revisions to the State Water Quality Standards (OAR 340-041) for EPA Review and Approval.
166.	11/18/2003	E-mail to Dru Keenan, EPA, John Palmer, EPA, Mary Lou Soscia, EPA, Audrey Hatch, ODFW, Cedric Cooney, ODFW, Rick Kepler, ODFW, Mark Hicks, Washington Department of Ecology, Jeffrey Lockwood, NMFS, and Robert C. Anderson, NMFS, from Debra Sturdevant, DEQ, Subject: RE: chum spawning in the Columbia.*  Att. 1: chum_spwn_aerial.jpg.
167.	11/13/2003	E-mail to Jeffrey Lockwood, NMFS, from Debra Sturdevant, DEQ, RE: thermal shock provision – DEQ draft rule of 11/6/03.
168.	11/10/2003	Department of Environmental Quality Water Pollution Division 41 Water Quality Standards: Beneficial Uses, Policies, and Criteria for Oregon.
169.	11/10/2003	E-mail to John Palmer, EPA, Jeffrey Lockwood, NMFS, Dru Keenan, EPA, Robert C. Anderson, NMFS, and Chris Mebane, NMFS, from Debra Sturdevant, DEQ, Subject: RE: spawning main stem Snake.*
170.	11/05/2003	E-mail to Jeffrey Lockwood, NMFS, from Debra Sturdevant, DEQ, Subject: RE: Conference call for Map Issues.*
171.	11/04/2003	E-mail to Jeffrey Lockwood, NMFS, and Dru Keenan, EPA, from Debra Sturdevant, DEQ, Subject: RE: Conference call for Map Issues.*
172.	11/04/2003	E-mail to John Palmer, EPA, Jeffrey Lockwood, NMFS, Dru Keenan, EPA, and Robert Anderson, NMFS, from Debra Sturdevant, DEQ, Subject: spawning main stem Snake.*
173.	11/03/2003	E-mail to Jeffrey Lockwood, NMFS, from Debra Sturdevant, DEQ, Subject: RE: on another topic - winter cold water.*
174.	11/03/2003	E-mail to Jeffrey Lockwood, NMFS, from Debra Sturdevant, DEQ, Subject: on another topic - winter cold water.*
175.	11/03/2003	E-mail to Debra Sturdevant, DEQ, Emily Smith, DEQ, Jeffrey Lockwood, NMFS, John Palmer, EPA, Dru Keenan, EPA, Robert C. Anderson, NMFS, and Chris Mebane, NMFS, from Tracy Harrison, DEQ, Subject: Mid Coast with Salmon Anchor Habitat and T Data.*  Att. 1: Critical Period Fish Use Designations - Mid Coast Basin, Oregon (Draft 11/03/2003).



NO.	Date	Description
176.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, Deschutes Basin, Oregon (see Beneficial Use Maps folder).
177.	11/2003	Salmonid Designation Use Map: Salmon, Steelhead & Bull Trout Spawning through Fry Emergence Use Designations, Deschutes Basin, Oregon (see Beneficial Use Maps folder).
178.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, Grande Ronde Basin, Oregon (see Beneficial Use Maps folder).
179.	11/2003	Salmonid Designation Use Map: Salmon, Steelhead & Bull Trout Spawning through Fry Emergence Use Designations, Grande Ronde Basin, Oregon (see Beneficial Use Maps folder).
180.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, Hood Basin, Oregon (see Beneficial Use Maps folder).
181.	11/2003	Salmonid Designation Use Map: Salmon, Steelhead & Bull Trout Spawning through Fry Emergence Use Designations, Hood Basin, Oregon (see Beneficial Use Maps folder).
182.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, John Day Basin, Oregon (see Beneficial Use Maps folder).
183.	11/2003	Salmonid Designation Use Map: Salmon, Steelhead & Bull Trout Spawning through Fry Emergence Use Designations, John Day Basin, Oregon (see Beneficial Use Maps folder).
184.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, Mid-Coast Basin, Oregon (see Beneficial Use Maps folder).
185.	11/2003	Salmonid Designation Use Map: Salmon & Steelhead Spawning through Fry Emergence Use Designations, Mid-Coast Basin, Oregon (see Beneficial Use Maps folder).
186.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, North Coast Basin, Oregon (see Beneficial Use Maps folder).
187.	11/2003	Salmonid Designation Use Map: Salmon & Steelhead Spawning through Fry Emergence Use Designations, North Coast Basin, Oregon (see Beneficial Use Maps folder).
188.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, Sandy Basin, Oregon (see Beneficial Use Maps folder).
189.	11/2003	Salmonid Designation Use Map: Salmon & Steelhead Spawning through Fry Emergence Use Designations, Umpqua Basin, Oregon (see Beneficial Use Maps folder).
190.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, Umpqua Basin, Oregon (see Beneficial Use Maps folder).
191.	11/2003	Salmonid Designation Use Map: Salmon & Steelhead Spawning through Fry Emergence Use Designations, Sandy Basin, Oregon (see Beneficial Use Maps folder).
192.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, South Coast Basin, Oregon (see Beneficial Use Maps folder).
193.	11/2003	Salmonid Designation Use Map: Salmon & Steelhead Spawning through Fry Emergence Use Designations, South Coast Basin, Oregon (see Beneficial Use Maps folder).
194.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, Umatilla Basin, Oregon (see Beneficial Use Maps folder).
195.	11/2003	Salmonid Designation Use Map: Salmon & Steelhead Spawning through Fry Emergence Use Designations, Umatilla Basin, Oregon (see Beneficial Use Maps folder).
196.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, Rogue Basin, Oregon (see Beneficial Use Maps folder).
197.	11/2003	Salmonid Designation Use Map: Salmon & Steelhead Spawning through Fry Emergence Use Designations, Rogue Basin, Oregon (see Beneficial Use Maps folder).
198.	11/2003	Salmonid Designation Use Map: Salmonid Use Designations, Willamette Basin, Oregon (see Beneficial Use Maps folder).
199.	11/2003	Salmonid Designation Use Map: Salmon & Steelhead Spawning through Fry Emergence Use Designations, Willamette Basin, Oregon (see Beneficial Use Maps folder).
200.	10/31/2003	E-mail to Dru Keenan, EPA, Jeffrey Lockwood, NMFS, and John Palmer, EPA, from Debra Sturdevant, DEQ, Subject: spawning dates in the TMDL.*
201.	10/30/2003	E-mail to Jeffrey Lockwood, NMFS, from Tracy Harrison, DEQ, Subject: RE: ecotrust.*  Att. 1: Coos Bay and River t Millicoma - S Fk Coos R Confluence - Anadromous Species.
202.	10/30/2003	E-mail to Jeffrey Lockwood, NMFS, John Palmer, EPA, and Debra Sturdevant, DEQ, from Tracy Harrison, DEQ, Subject: FW: salmon anchor habitat data.*
203.	10/30/2003	E-mail Jeffrey Lockwood, NMFS, from Debra Sturdevant, DEQ, Subject: RE: ecotrust.*
204.	10/28/2003	Middle Willamette River 7-Day Moving Average of the Daily Maximum Flow-Weighted Temperature, August 10, 2001.*
205.	10/28/2003	Preliminary Model Results from DEQ - Willamette River (10/28/03).*
206.	10/22/2003	E-mail to Cedric Cooney, ODFW, Jeffrey Lockwood, NMFS, Elizabeth Materna, FWS, John Palmer, EPA, Robert C. Anderson, NMFS, Rick Kepler, ODFW, Audrey Hatch, ODFW, Emily Smith, DEQ, William Bogue, EPA, Chris Mebane, NMFS, and Debra Sturdevant, DEQ, from Tracy Harrison, DEQ, Subject: Coho only spawning.*
207.	10/21/2003	E-mail to Robert C. Anderson, NMFS, from Debra Sturdevant, DEQ, Subject: RE: Temperature data query #2.*

NO.	Date	Description
208.	10/17/2003	E-mail to Jeffrey Lockwood, NMFS, Elizabeth Materna, FWS, John Palmer, EPA, Robert C. Anderson, NMFS, Rick Kepler, ODFW, Audrey Hatch, ODFW, Emily Smith, DEQ, Tracy Harrison, DEQ, William Bogue, EPA, and Chris Mebane, NMFS, from Cedric Cooney, ODFW, Subject: Lines-of-evidence query results - updated as of 10/15/2003 (w/attachment).*
		Att. 1: DEQ checks 10-17-2003.xls.
209.	10/16/2003	E-mail to Jeffrey Lockwood, NMFS, Elizabeth Materna, FWS, John Palmer, EPA, Robert C. Anderson, NMFS, Rick Kepler, ODFW, Cedric Cooney, ODFW, Audrey Hatch, ODFW, Emily Smith, DEQ, Tracy Harrison, DEQ, William Bogue, EPA, and Chris Mebane, NMFS, from Debra Sturdevant, DEQ, Subject: RE: CORRECTION: Draft notes from 10/14 where & when.*
		Att. 1: Meeting Notes for October 14, 2003 Beneficial Use Group - DRAFT by J. Lockwood.
210.	10/15/2003	E-mail to Chris Mebane, NMFS, from Debra Sturdevant, DEQ, Subject: RE: Temperature data query #2.*
211.	10/09/2003	E-mail to William Bogue, EPA, Cedric Cooney, ODFW, Chris Mebane, NMFS, Debra Sturdevant, DEQ, Dru Keenan, EPA, Elizabeth Materna, FWS, Jeffrey Lockwood, NMFS, John Palmer, EPA, Tracy Harrison, DEQ, Rick Kepler, ODFW, and Audrey Hatch, ODFW, from Emily Smith, DEQ, Subject: Where and When comments.*
		Att. 1: Where and When comments (Fish Use Maps and Tables) (DRAFT 10/8/03).
		Att. 2: DEQ WQ Standards Revision Official Public Comment Contacts.
212.	10/08/2003	E-mail to Jeffrey Lockwood, NMFS, and Debra Sturdevant, DEQ, Subject: Were & When.*
		Att. 1: Internal comments received during comment period: Where and When - Last updated 10/08/03.
213.	10/08/2003	E-mail to Dru Keenan, EPA, and Debra Sturdevant, DEQ, from Tracy Harrison, DEQ, Subject: RE: Where and When: Forest Service comments.*
		Att. 1: External comments: Where and When - Draft survey: Last updated: 10/08/03.
214.	10/08/2003	E-mail to Dru Keenan, EPA, and Debra Sturdevant, DEQ, from Tracy Harrison, DEQ, Subject: Where and When: forest service comments.*
		Att. 1: External comments: Where and When.
215.	10/07/2003	E-mail to Jeffrey Lockwood, NMFS, from Debra Sturdevant, DEQ, Subject: RE: where & when [pages 2 and 3 are missing].*
216.	09/12/2003	E-mail to Jeffrey Lockwood, NMFS, Dru Keenan, EPA, and Chris Mebane, NMFS, from Debra Sturdevant, DEQ, Subject: RE: 16 vs. 18.*
217.	08/15/2003	Department of Environmental Quality Water Pollution Division 41 Water Quality Standards: Beneficial Uses, Policies, and Criteria for Oregon.*
218.	08/05/2003	E-mail to Jeffrey Lockwood, NMFS, and Mary Lou Soscia, EPA, from Debra Sturdevant, DEQ, Subject: RE: Ecotrust anchor habitat.*
219.	08/01/2003	E-mail to Chris Mebane, NMFS, John Palmer, EPA, Jeffrey Lockwood, NMFS, William Bogue, EPA, Dru Keenan, EPA, Tracy Harrison, DEQ, Debra Sturdevant, DEQ, and Emily Smith, DEQ, from Audrey Hatch, ODFW, Subject: revised Willamette R timing.*
		Att. 1: Willamette R - Falls to Newburg - Non-Anadromous Species.
		Att. 2: Willamette R mouth to falls - Non-Anadromous Species.
		Att. 3: Willamette River - Newburg to Yamhill R - Non-Anadromous Species.
		Att. 4: Willamette River - Yamhill R to McKenzie R - Non-Anadromous Species.
220.	08/01/2003	E-mail to Dru Keenan, EPA, Cedric Cooney, ODFW, Chris Mebane, NMFS, Elizabeth Materna, FWS, Emily Smith, DEQ, Jeffrey Lockwood, NMFS, John Palmer, EPA, Marilyn Fonseca, DEQ, Rick Kepler, ODFW, Robert C. Anderson, NMFS, Stephen Ralph, EPA, Tracy Harrison, DEQ, and William Bogue, EPA, from Debra Sturdevant, DEQ, Subject: Spawning in migration corridors.*
221.	07/31/2003	E-mail to William Bogue, EPA, Dru Keenan, EPA, John Palmer, EPA, Elizabeth Materna, FWS, Chris Mebane, NMFS, Jeffrey Lockwood, Robert C. Anderson, NMFS, Debra Sturdevant, DEQ, from Rick Kepler, ODFW, Subject: RE: resident species.*
222.	07/25/2003	E-mail to John Palmer, EPA, and Dru Keenan, EPA, from Debra Sturdevant, DEQ, Subject: RE: New Spawning Proposal!!!!!! [p. 3 missing].*
223.	07/25/2003	E-mail to William Bogue, EPA, Chris Mebane, NMFS, Debra Sturdevant, DEQ, Dru Keenan, EPA, Elizabeth Materna, FWS, Emily Smith, DEQ, Jeffrey Lockwood, NMFS, John Palmer, EPA, Marilyn Fonseca, DEQ, Rick Kepler, ODFW, Robert C. Anderson, NMFS, Stephen Ralph, EPA, Tracy Harrison, DEQ, from Cedric Cooney, ODFW, Subject: Response to questions from the July15-16 Where/When meeting.*
		Att. 1: Fish dist questions with answers.doc.

NO.	Date	Description
224.	07/17/2003	E-mail to William Bogue, EPA, Chris Mebane, NMFS, Debra Sturdevant, DEQ, Dru Keenan, EPA, Elizabeth Materna, FWS, Jeffrey Lockwood, NMFS, John Palmer, EPA, Tracy Harrison, DEQ, Rick Kepler, ODFW, Stephen Ralph, EPA, Robert C. Anderson, NMFS, Steve Ellis, Tetrattech, and Cedric Cooney, ODFW, from Emily Smith, DEQ, Subject: updated meeting notes.*  Att. 1: Where and When Workgroup Meeting Notes/Decisions for July 15 and 16.
225.	07/14/2003	Draft Department of Environmental Quality Water Pollution Division 41 State-Wide Water Quality Management Plan; Beneficial Uses, Policies, Standards, and Treatment Criteria for Oregon, July 14, 2003 (3rd Draft).*
226.	07/07/2003	E-mail to Robert C. Anderson, NMFS, Robert Beschta, OSU, Christian Torgersen, USGS, Larry Crawshaw, PSU, Robert Danehy, Weyerhaeuser Company, Joe Ebersole, EPA, Bob Eimstad, Carollo.com, Sherri Johnson, OSU, Jeffrey Lockwood, NMFS, Elizabeth Materna, FWS, Gordon Reeves, USFS, and Tamzen Stringham, OSU, from Debra Sturdevant, DEQ, Subject: FW: T Standards issues to resolve.*  Att. 1: Temperature Standard Issues. Att. 2: Draft Oregon Temperature Criteria - July 7 Version.
227.	07/03/2003	E-mail to Robert C. Anderson, NMFS, Robert Beschta, OSU, Christian Torgersen, USGS, Larry Crawshaw, PSU, Robert Danehy, Weyerhaeuser Company, Joe Ebersole, EPA, Bob Eimstad, Carollo.com, Sherri Johnson, OSU, Jeffrey Lockwood, NMFS, Elizabeth Materna, FWS, Matthew Boyd, Carollo.com, Michael McNamara, USFS, Gordon Reeves, USFS, and Tamzen Stringham, OSU, from Debra Sturdevant, DEQ, Subject: FW: huc jpegs.*  Att. 1: John Day HUCs with Hydrology. Att. 2: Umpqua HUCs with Hydrology.
228.	06/26/2003	E-mail to John Palmer, EPA, Dru Keenan, EPA, and William Bogue, EPA, from Debra Sturdevant, DEQ, Subject: RE: (18/16 split).*
229.	06/19/2003	E-mail to William Bogue, EPA, Chris Mebane, NMFS, Debra Sturdevant, DEQ, Dru Keenan, EPA, Elizabeth Materna, FWS, Emily Smith, DEQ, Jeffrey Lockwood, NMFS, John Palmer, EPA, Marilyn Fonseca, DEQ, Rick Kepler, ODFW, Robert C. Anderson, NMFS, Stephen Ralph, EPA, Tracy Harrison DEQ, from Cedric Cooney, ODFW, Subject: Line-of-evidence query results and complete set of timing tables.*  Att. 1: DEQ.xls.
230.	06/02/2003	E-mail to Chris Mebane, NMFS, Debra Sturdevant, DEQ, Dru Keenan, EPA, Elizabeth Materna, FWS, Jeffrey Lockwood, NMFS, John Palmer, EPA, Marilyn Fonseca, DEQ, Rick Kepler, ODFW, Robert C. Anderson, NMFS, Stephen Ralph, EPA, from Cedric Cooney, ODFW, Subject: draft timing tables & PowerPoint presentation.*
231.	05/27/2003	Life Stage Timing Criteria, Definitions, & Questions (from ODFW).
232.	05/27/2003	Fish Habitat Distribution Development Project Primary Data Products – Descriptions and major attributes (from ODFW).
233.	05/16/2003	E-mail to Robert C. Anderson, NMFS, Robert Beschta, OSU, Christian Torgersen, USGS, Larry Crawshaw, PSU, Robert Danehy, Weyerhaeuser Company, Joe Ebersole, EPA, Bob Eimstad, Carollo.com, Sherri Johnson, OSU, Jeffrey Lockwood, NMFS, Elizabeth Materna, FWS, Matthew Boyd, Carollo.com, Michael McNamara, USFS, Gordon Reeves, USFS, and Tamzen Stringham, OSU, from Debra Sturdevant, DEQ, Subject: Another Option.*
234.	02/2003	Relationships Between Bank Treatment Nearshore Development and Anadromous Resident Fish in the Lower Willamette River, Annual Progress Report, July 2001 - June 2002. Oregon Department of Fish and Wildlife. February 2003. [selected pages].*

#### Temperature Guidance Records

#### A. NMFS Documents

NO.	Date	Description
234a.	04/23/2003	Final letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards, containing NMFS position/comments on final Temperature Guidance.**
234b.	04/11/2003	Final Draft of letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards, containing NMFS comments on Temperature Guidance.**

NO.	Date	Description
234c.	04/09/2003	Enclosure 1: Draft Recommendations for ESA and MSA Consultations on EPA approval of Water Temperature Standards.**  Redacted: See Excluded Document No. 78.
235.	03/26/2003	E-mail to Melanie Rowland, NOAA GCNW, from Jeffrey Lockwood, NMFS, Subject: Re: CWA and temperature project.
235a.	03/17/2003	E-mail to John Palmer, EPA, Stephen Zylstra, FWS, Russ Strach, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: Draft Letters, forwarding draft NMFS comment letter on Temperature Guidance for review and comment.**  Att. 1: Draft letter to John Iani, EPA, from D. Robert Lohn, Re: October 10, 2002, draft EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards. (March 13, 2003).
236.	03/14/2003	E-mail to Kim Kratz, NMFS, and Jeffrey Lockwood, NMFS, from Walt Dickhoff, NMFS, Subject: Review of temperature guidance, containing internal discussion re temperature guidance and seeking comments.
236a.	03/13/2003	Enclosure 1: Draft Recommendations for ESA and MSA Consultations on EPA approval of Water Temperature Standards.**  Redacted: See Excluded Document No. 101.
236b.	03/12/2003	E-mail to Walton Dickhoff, NMFS, from Jeffrey Lockwood, NMFS, Subject: EPA Regional Water Temperature Guidance Project, forwarding attachments.**  Att. 1: Memorandum to Dr. Walton Dickhoff, NMFS, from Jeffrey Lockwood, NMFS, Subject: EPA Region 10 guidance for Pacific Northwest states and tribal temperature water quality standards, providing background and requesting comments on draft Temperature Guidance with respect to water temperature preferences and food availability.  Redacted: See Excluded Document No. 106.  Att. 2: EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards, March 11, 2003 Draft.
236c.	03/12/2003	Memorandum to Walton Dickhoff, NMFS, from Jeffrey Lockwood, NMFS, Subject: EPA Region 10 guidance for Pacific Northwest states and tribal temperature water quality standards, providing information and seeking input re temperature effects/food availability.**  Redacted: See Excluded Document No. 107.
236d.	03/12/2003	E-mail to Jeffrey Lockwood, NMFS, cc: Robert C. Anderson, NMFS, from Thomas Hooper, NMFS, Subject: Re: briefing material for 3/12 temperature meeting.**  Redacted: See Excluded Document No. 110.  Att. 1: Draft letter to Tom Fitzsimmons, Washington Department of Ecology, from D. Robert Lohn, NMFS, Re: Comments on Proposed Changes to the State Surface Water Quality Standards.
237.	12/12/2002	E-mail to Manette Simpson, DEQ, Dru Keenan, EPA, Elizabeth Materna, FWS, and Debra Sturdevant, DEQ, from Jeffrey Kockwood, NMFS, Subject: Re: comments on draft John Day monitoring.  Att. 1: Memorandum to Manette Simpson, DEQ, from Jeffrey Lockwood, NMFS, Subject: Comments on draft report Temperature Monitoring in the John Day River Basin for 2001 (November, 2002).
238.		[Removed duplicate of entry for No. 237 above made in error.]
239.	12/04/2002	E-mail to John Palmer, EPA, from Jeffrey Lockwood, NMFS, Subject: Re: [Fwd: Electronic version of temp comments].  Att. 1: Draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002, Draft EPA Region 10 Guidance for Pacific Northwest States and Tribal Temperature Water Quality Standards.
240.	12/02/2002	E-mail to Michael Tehan, NMFS, and Scott Hoefer, NMFS, from Jeffrey Lockwood, NMFS, Subject: spawning in John Day.  Att. 1: Memorandum to Debra Sturdevant, DEQ, Manette, Simpson, DEQ, and Joe Bernert, DEQ, from Rick Kepler, ODFW, Subject: Review of June 1, 2001 meeting on 1:24,000 Fish Distribution and Life Stage Timing Project.

NO.	Date	Description
241.	11/27/2002	E-mail to Robert C. Anderson, NMFS, and Jeffrey Lockwood, NMFS, from Anita Macauley, NMFS, Subject: OHB2002-0329-GC_final_11-26-2002.wpd.  Att. 1: Letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002, Draft EPA Region 10 Guidance for Pacific Northwest States and Tribal Temperature Water Quality Standards.
242.	11/22/2002	E-mail to Rachel Friedman, NMFS, Robert C. Anderson, NMFS, and Chris Looney, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Looking for a few good studies].
243.	11/22/2002	E-mail to Robert C. Anderson, NMFS, Rachel Friedman, NMFS, Ed Murrell, NMFS, and Chris Looney, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Draft Peer Review Questions].  Att. 1: Questions for the Scientific Peer Review Panel EPA's 2nd Draft Temperature Guidance, Draft 11/21/02.
243a.	11/20/2002	Att. 1: Draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002 Draft EPA Region 10 Guidance for Pacific Northwest States and Tribal Temperature Water Quality Standards (Revised: November 20, 2002; Printed: March 13, 2008), containing NMFS draft comments on Temperature Guidance. Att. 2: Draft EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards, 2nd Public Review Draft, October 10, 2002.**  Redacted: See Excluded Document No. 121.
244.	10/04/2002	Subject: [Fwd: Changes to Temp Guidance] From: Jeff Lockwood <jeffrey.lockwood@mercury.akctr.noaa.gov> Date: Fri, 04 Oct 2002 16:36:26 -0700 To: Blane Bellerud <Blane.Bellerud@noaa.gov>  E-mail to Blane Bellerud, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Changes to Temp Guidance].  Att. 1: V.1.2 Discussion of Use and Criteria Presented in Table 3.
245.	09/30/2002	Comments – September 30, 2002 draft temperature guidance, by NMFS.
246.	09/30/2002	E-mail to Robert C. Anderson, NMFS, Ed Murrell, NMFS, and Rachel Friedman, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Changes to Temp Guidance].  Att. 1: V.1.2 Discussion of Use and Criteria Presented in Table 3.
247.	09/03/2002	E-mail to Ed Murrell, NMFS, Rachel Friedman, NMFS, Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Revised Temp Guidance].  Att. 1: Draft EPA Region 10 Guidance for State and Tribal Temperature Water Quality Standards Working Draft - 2nd Public Review Draft, August 29, 2002.
248.	08/16/2002	Agenda - Cold Water Refugia Meeting - August 16, 2002.
248a.	09/04/2002	Att. 1: Memorandum to Dru Keenan, EPA, from Jeffrey Lockwood, NMFS, Subject: Comments on the EPA document Major Decisions Regarding the Draft Temperature Guidance (August 5, 2002), **  [Redacted: See Excluded Document No. 134].
249.	08/09/2002	E-mail to Rachel Friedman, NMFS, Ed Murrell, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Mulling over the Metric].  Att. 1: Ave Temps.xls [Excel document]. Att. 2: Summaris of T data West OR. xls [Excel document]. Att. 3: Memorandum to John Palmer, EPA, from Debra Sturdevant, DEQ, Subject: Temperature metric.
250.	08/09/2002	E-mail to Robert C. Anderson, NMFS from Jeffrey Lockwood, NMFS, Subject: [Fwd: Mulling over the Metric], forwarding e-mail to Geoffrey Poole, EPA, and 21 other recipients, from Dale McCullough, CRITFC, Subject: Re: Mulling over the Metric.  Att. 1: Memorandum to John Palmer, EPA, from Dale McCullough, CRITFC, Re: E-mail from J. Palmer, "Mulling over the Metric," dated August 6, 2002.
251.	08/09/2002	E-mail to Rachel Friedman, NMFS, Ed Murrell, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Mulling over the Metric].

NO.	Date	Description
252.	08/09/2002	E-mail to Jeffrey Lockwood, NMFS, from Robert C. Anderson, NMFS, Subject: Re: [Fwd: Major Decisions for Temp Guidance/Next meeting - Aug 28th].
253.	08/09/2002	E-mail to Russ Strach, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: [Fwd: Major Decisions for Temp Guidance/Next meeting - Aug 28th].  Att. 1: Memorandum to John Palmer, EPA, from Russell Strach, NMFS, Subject: Comments on the EPA document Major Decisions Regarding the Draft Temperature Guidance (August 5, 2002).
254.	08/08/2002	E-mail to Russ Strach, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Major Decisions for Temp Guidance/Next meeting - Aug 28th].  Att. 1: Major Decisions Regarding the Draft Temperature Guidance, 8/5/02.
255.	08/07/2002	E-mail to Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Oregon's temp comments], forwarding 07/17/2002 e-mail to David Mabe, DEQ, and 21 other recipients, from John Palmer, EPA, Subject: Oregon's temp comments, forwarding 07/15/2002 e-mail to John Palmer, EPA, Subject: Comments on the June 18th Working Draft of the Temp Guidance.  Att. 1: Memorandum to John Palmer, EPA, from Mark Charles, ODEQ, Subject: June 18th Working Draft Temperature Guidance.
256.	08/07/2002	E-mail to Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: CRITFC temp comments].  Att. 1: Memorandum to John Palmer, EPA, from Patti Howard and Dale McCullough, CRITFC, Subject: CRITFC Staff Comments on the Second Public Review Document for the EPA Region 10 Draft Temperature Criteria Guidance Project.
257.	08/06/2002	E-mail to Jeffrey Lockwood, NMFS, from Russ Strach, NMFS, Subject: Re: [Fwd: Major Decisions for Temp Guidance/Next meeting - Aug 28th].
258.	08/06/2002	E-mail to Robert C. Anderson, NMFS, Russ Strach, NMFS, Ed Murrell, NMFS, Rachel Friedman, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Major Decisions for Temp Guidance/Next meeting - Aug 28th].  Att. 1: Major Decisions Regarding the Draft Temperature Guidance, 8/5/02.
258a.	08/01/2002	E-mail to Bob Lohn, NMFS, Mike Crouse, NMFS, Russ Strach, NMFS, Jeffrey Lockwood, NMFS, and Patti Vandetta, NMFS, from Michael Tehan, NMFS, Subject: Temperature Project Briefing - internal briefing document for Regional Administrator discussing status of temperature guidance project and describing potential manner of soliciting scientific information regarding thermal refugia and identifying areas of uncertainty and issues needing clarification.**  Redacted: See Excluded Document No. 62.
258b.	07/11/2002	E-mail to Rachel Friedman, NMFS, Ed Murrell, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: Comments on EPA's draft regional temp. criteria, forwarding memorandum containing comments.**  Att. 1: Draft Memorandum to John Palmer, EPA, from Russ Strach, NMFS, Subject: Reply to your request for comments on the June 18, 2002 Draft Region 10 Guidance for State and Tribal Temperature Water Quality Standards, providing comments on draft Temperature Guidance.
258c.	07/10/2002	Email to Russ Strach, NMFS, cc: Robert C. Anderson, NMFS, and Rachel Friedman, NMFS, from Jeffrey Lockwood, NMFS, forwarding final temperature comment memo.**  Att. 1: Draft Memorandum to John Palmer, EPA, from Russ Strach, NMFS, Subject: Reply to your request for comments on the June 18, 2002 Draft Region 10 Guidance for State and Tribal Temperature Water Quality Standards, providing comments on draft Temperature Guidance.
258d.	06/24/2002	E-mail to Jeffrey Lockwood, NMFS, from John Risley, USGS, Subject: RE: thermal models.**
259.	06/20/2002	E-mail to Rachel Friedman, NMFS, Chris Looney, NMFS, Ed Murrell, NMFS, Robert C. Anderson, NMFS, and Russ Strach, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Working Draft of Revised Temp Guidance].  Att. 1: EPA Region 10 Guidance for State and Tribal Temperature Water Quality Standards, 2nd Public Review Draft, June 18, 2002.



NO.	Date	Description
260.	06/20/2002	E-mail to Rachel Friedman, NMFS, Chris Looney, NMFS, Ed Murrell, NMFS, Robert C. Anderson, NMFS, and Russ Strach, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Working Draft of Revised Temp Guidance]  Att. 1: EPA Region 10 Guidance for State and Tribal Temperature Water Quality Standards, 2nd Public Review Draft, June 18, 2002.
260a.	06/13/2002	One-page memo to Jeffrey Lockwood, NMFS, from Russ Strach, NMFS, Subject: per your request, re thermal refugia.***
261.	05/15/2002	E-mail to Kelley Jorgensen, WSDOT, from Robert C. Anderson, NMFS, Subject: [Fwd: temperature refugia paper].  Att. 1: Ebersole, Joseph, L. 2001. Heterogeneous Thermal Habitat for Northeast Oregon Stream Fishes. Doctoral dissertation. Oregon State University. Corvallis, Oregon.
262.	05/15/2002	E-mail to Charley Rains, NMFS, Robert C. Anderson, NMFS, Rachel Friedman, NMFS, Chris Looney, NMFS, and Ed Murrell, NMFS, from Jeffrey Lockwood, NMFS, Subject: temperature refugia paper.  Att. 1: Ebersole, Joseph, L. 2001. Heterogeneous Thermal Habitat for Northeast Oregon Stream Fishes. Doctoral dissertation. Oregon State University. Corvallis, Oregon.
263.	05/13/2002	E-mail to Chris Looney, NMFS, Ed Murrell, NMFS, Rachel Friedman, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Questions for 5/21/02 mtg].  Att. 1: SLS Criteria & Application Straw Option, Draft, May 8, 2002.
264.	04/30/2002	E-mail to Rachel Friedman, NMFS, Chris Looney, NMFS, Ed Murrell, NMFS, and Robert Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Draft Outline of Revised Temp Guidance], forwarding e-mail to David Mabe, DEQ, and 20 other recipients, from John Palmer, EPA, Subject: Draft Outline of Revised Temp Guidance.  Att. 1: Temperature Guidance Outline, Draft 4/29/02. Att. 2: Recommended Framework for Temperature Guidance, Draft 4/29/02. Att. 3: SLS Application Options Issues/Assumptions for All Options, Draft 4/18/02. Att. 4: Feedback on EPA's Proposed Framework for Temperature Guidance. Att. 5: Memorandum to John Palmer, EPA, from Jeffrey Lockwood, NMFS, Subject: Feedback on EPA's proposed framework.
265.	04/23/2002	E-mail to Jeffrey Lockwood, NMFS, from Robert C. Anderson, NMFS, Subject: Re: [Fwd: Update and Status].
266.	04/23/2002	Steelhead Spawn Table.
266a.	04/18/2002	Memorandum to John Palmer, EPA, from Jeff Lockwood, NMFS, Subject: Feedback on EPA's proposed framework.**
266b.	04/09/2002	Early draft of letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October, 2001 Draft EPA Region 10 Guidance for State and Tribal Temperature Water Quality Standards, attached to NMFS draft comments on draft Temperature Guidance.***  Att. 1: PREDECISIONAL DRAFT Comments on Public Review Draft Guidance For State and Tribal Temperature Water Quality Standards Northwest Region, National Marine Fisheries Service; early draft of comments on October 2001 Public Review Draft of Temperature Guidance (note: these comments were never finalized or circulated outside of NMFS).
267.	04/02/2002	E-mail to John Palmer, EPA, from Jeffrey Lockwood, NMFS, Subject: Re: Temperature is a limiting factor for salmon.
267a.	03/28/2002	Draft table entitled "Water Temperature Effects on Salmon and Steelhead Trout," author unidentified.**
268.	03/12/2002	E-mail to Robert C. Anderson, NMFS, Rachel Friedman, NMFS, Chris Looney, NMFS, and Ed Murrell, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Chiwawa Case study].  Att. 1: Application of New Approaches to Water Quality Temperature Criteria. Chiwawa River Case Study. For Idaho Department of Environmental Quality by BioAnalysts, Inc. March 2002.
269.	02/11/2002	E-mail to Dru Keenan, EPA, and John Palmer, EPA, from Jeffrey Lockwood, NMFS, Subject: Why Temperature Matters - ISG.  Att. 1: Water Temperature Effects on Salmonid Fishes, Excerpted from Return to the River 2000 Independent Scientific Group, Compiled by Jeff Lockwood, NMFS.

NO.	Date	Description
270.	02/11/2002	Water Temperature Effects on Salmon and Steelhead. Source: Status Review of Chinook Salmon from Washington, Idaho, Oregon, and California:
270a.	10/01/2001	Jeff Lockwood's comments on draft flip chart notes from September 26, 2001 Technical Workgroup Meeting.**  Redacted: See Excluded Document No. 153.
270b.	09/18/2001	Memorandum to John Palmer, EPA, from Russ Strach, NMFS, providing comments on 09/04/2001 draft of Temperature Guidance.**
271.	08/17/2001	E-mail to Jason Dunham, USFS, and 14 other recipients, from Jeffrey Lockwood, NMFS, Subject: instream temperature variability.
272.	07/19/2001	Six Options Matrix created by NMFS for the Policy Workgroup.
273.	06/06/2001	Consideration of Accessible, Inaccessible, Unoccupied and Historic Habitat in NMFS' Designation of Critical Habitat. Source: Designated Critical Habitat: Critical Habitat for 19 Evolutionarily Significant Units of Salmon and Steelhead in Washington, Oregon, Idaho, and California. 65 FRN 7764, February 16, 2000. Available at <a href="http://www.nwr.noaa.gov/1salmon/salmesa/fedreg.htm">http://www.nwr.noaa.gov/1salmon/salmesa/fedreg.htm</a> .
274.	[undated]	Mebane's Temperature Graphics from Boise Meeting.
274a.	[undated]	Draft of internal briefing document to Bob Lohn, NMFS, from Jeffrey Lockwood, NMFS, discussing status of temperature guidance project and potential manner of soliciting scientific information regarding thermal refugia and identifying areas of uncertainty and issues needing clarification (earlier draft version of AR Document No. 258a/Excluded Document No. 62, including redline/strikethrough comments and handwritten notes).**  Redacted: See Excluded Document No. 65.

**B. EPA Documents**

NO.	Date	Description
275.	04/28/2003	E-mail to David Mabe, DEQ, and 20 other recipients, from John Palmer, EPA, Subject: Final Temperature Guidance!!  Att. 1: EPA Region 10 Guidance For Pacific Northwest State and Tribal Temperature Water Quality Standards, April 2003 Att. 2: Letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: Comments on Final Temperature Guidance. Att. 3: Letter to John Iani, EPA, from Regional Director, USFWS, Re: Comments on Final Temperature Guidance. Att. 4: EPA Issues Final Water Temperature Guidance - April 2003.
276.	04/21/2003	E-mail to David Mabe, DEQ, and 7 other recipients, from John Palmer, EPA, Subject: Temp Guidance & Press Release.  Att. 1: EPA Region 10 Guidance For Pacific Northwest State and Tribal Temperature Water Quality Standards, Final Draft - April 21, 2003 [Of the identical e-mail attachments, only the Word document was converted to PDF and attached].
277.	03/12/2003	E-mail to David Mabe, DEQ, and 21 additional recipients, from John Palmer, EPA, Subject: Final Draft of Temp guidance.  Att. 1: EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards, March 11, 2003 Draft [Of the identical e-mail attachments, only the Word document was converted to PDF and attached].
277a.	03/11/2003	Att. 1: EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards (March 11, 2003 Draft).**  Redacted: See Excluded Document No. 160.
278.		[The date given for the document that was entered here was in error, so the entry was removed. The document was the same as No. 301.]



NO.	Date	Description
279.	02/14/2003	E-mail to David Mabe, DEQ, and 19 other recipients, from John Palmer, EPA, Subject: Revised EPA Temp Guidance (attached).  Att. 1: EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards, February 14, 2003 Draft.
280.	01/17/2003	E-mail to Patti Howard, CRITFC, from John Palmer, EPA, Subject: Re: Temp Materials (Changes, Peer Review, Comment Sum).
281.	01/16/2003	E-mail to David Mabe, DEQ, and 21 other recipients, from John Palmer, EPA, Subject: Temp Materials (Changes, Peer Review, Comment Sum).  Att. 1: Possible Changes to Temperature Guidance, Draft 1/16/02. Att. 2: Summary of Scientific Peer Review Discussion Concerning US EPA Region 10 Guidance For Stream Temperature Water Quality Standards, December 3, 2002. Att. 3: Major Comments (categorized) on 2nd Draft of Temperature Guidance, 1/7/03.
282.	01/02/2003	E-mail to David Mabe, DEQ, and 21 other recipients, from John Palmer, EPA, Subject: Temp PW/TW Mtg & Possible Changes to Guidance.  Att. 1: Possible Changes to Temperature Guidance, Draft 1/02/02.
283.	12/19/2002	E-mail to David Mabe, DEQ, and 21 other recipients, from John Palmer, EPA, Subject: Steps to Finalize the Temp Guidance.
284.	12/19/2002	E-mail to Dru Keenan, EPA, and 21 other recipients, from John Palmer, EPA, Subject: Help respond to comment: temp equilibrium concept.
285.	12/18/2002	E-mail to Dru Keenan, EPA, and 21 other recipients, from John Palmer, EPA, Subject: Help respond to comment: separate spawning criteria.  Att. 1: Letter to John Palmer, EPA, from Gregg Carrington, Chelan PUD, Subject: Response to Comments on EPA Temperature Guidance Criteria.
286.	12/18/2002	E-mail to Dru Keenan, EPA, and 21 other recipients, from John Palmer, EPA, Subject: Help respond to comment: temp and fish populations.
287.	12/12/2002	E-mail to David Mabe, DEQ, and 21 other recipients, from John Palmer, EPA, Subject: Temp Comments 2nd email.  Att. 1: Water Quality Temperature Criteria Guidance Collected Comments (Comments submitted from October 10 to November 26, 2002) Part II – Environmental Groups. and Municipalities U.S. Environmental Protection Agency Region 10 – Pacific Northwest, December 2002. Att. 2: Water Quality Temperature Criteria Guidance Collected Comments (Comments submitted from October 10 to November 26, 2002) Part III – Native Tribes, State Agencies and Federal Agencies U.S. Environmental Protection Agency Region 10 – Pacific Northwest, December 2002.
288.	12/01/2002	E-mail to John Palmer, EPA, and 14 other recipients, from Sherri Johnson, EPA Contractor, Subject: RE: Peer Review Questions.
289.	11/21/2002	E-mail to Dru Keenan, EPA, and 13 other recipients, from John Palmer, EPA, Subject: Draft Peer Review Questions.  Att. 1: Questions for the Scientific Peer Review Panel EPA's 2nd Draft Temperature Guidance, Draft 11/21/02.
290.	11/18/2002	E-mail to Dale McCullough, CRITFC, from John Palmer, EPA, Subject: Re: If you had one question for the peer review group.
291.	10/31/2002	E-mail to Debra Sturdevant, DEQ, from John Palmer, EPA, Subject: RE: Looking for a few good studies.
292.	10/15/2002	E-mail to David Mabe, DEQ, and 21 other recipients, from John Palmer, EPA, Subject: NOAA NMFS comments.
293.	10/03/2002	E-mail to David Mabe, DEQ, and 21 other recipients, from John Palmer, EPA, Subject: ID Temp Comments.  Att. 1: Comments on August 29, 29002 2nd Public Review Draft of "EPA Region 10 Guidance for State and Tribal temperature Water Quality Standards."
294.	10/03/2002	E-mail to David Mabe, DEQ, and 21 other recipients, from John Palmer, EPA, Subject: OR Temp Comments, forwarding 10/01/2002 e-mail to John Palmer, EPA, from Martha Tully, DEQ, Subject: comment to forward to EPA.  Att. 1: Memorandum to John Palmer, EPA, Randy Smith, EPA, and Dru Keenan, EPA, from Debra Sturdevant, DEQ, SUBJECT: EPA Temperature Guidance, August 29 Working Draft and September 30 Revisions.

NO.	Date	Description
295.	09/18/2002	Graphs and Charts.
296.	08/30/2002	E-mail to Jeffrey Lockwood, NMFS, from Joe Ebersole, EPA, Subject: Re: Aug. 16 p.m. briefing for NMFS regional administrator.  Att. 1: Presentation titled "Thermally Heterogeneous Habitat for Northeast Oregon Stream Fishes," by Joe Ebersole, U.S. EPA National Health and Environmental Effects Research Laboratory, Western Ecology Division, Corvallis, Oregon [PowerPoint File].
297.	08/06/2002	E-mail to David Mabe, DEQ, and 21 other recipients, from John Palmer, EPA, Subject: Mulling over the Metric.
298.	04/03/2002	E-mail to Jeffrey Lockwood, NMFS, from John Palmer, EPA, Subject: Re: Temperature is a limiting factor for salmon.
299.	04/02/2002	E-mail to Jeffrey Lockwood, NMFS, Dru Keenan, EPA, John Palmer, EPA, and Robert C. Anderson, NMFS, Subject: Re: Temperature is a limiting factor for salmon.
300.	03/07/2002	E-mail to Geoffrey Poole, and 12 other recipients, from Dru Keenan, EPA, Subject: Draft Meeting Notes for 3/4/02 Mtg.  Att. 1: DRAFT: Flip Chart Notes from February 4, 2002 Technical Workgroup Meeting, 3/6/02.
301.	02/12/2002	Agenda - Public Workshop on EPA Region 10 Guidance for State and Tribal Temperature Water Quality Standards, Kennewick, WA - February 12, 2002.
302.	09/24/2001	Comparison between Technical Workgroup Recommended "Targets" and Existing/Proposed State Numeric Criteria.
303.	08/13/2001	E-mail to Cathy Tortorici, NMFS, and 32 other recipients, from John Palmer, EPA, Subject: Agenda for Temp Policy Meeting (August 14 & 15th).  Att. 1: Remaining Decisions on Key Features of the Temperature Guidance, To-Do's and Preparation for the August 14 & 15 Policy Meeting. Att. 2: Missing [Temp-regional-interimcrit-080901.doc.; could not open]. Att. 3: Pros and Cons of an Initial Assessment Based on Species Life State Criteria. Draft by ebra August 6, 2001, Amended 8/13/01. Att. 4: Meeting Summary for July 19 & 20th, 2001, Pacific Northwest Temperature Project Policy Workgroup, August 2, 2001 version.
304.	08/08/2001	Species Life Stage Module Criteria, Developed by the technical workgroup as of August 8, 2001.
305.	07/02/2001	E-mail to Geoffrey Poole, EPA, and 13 other recipients, from Dru Keenan, EPA, Subject: Final Meeting Summary for 5/22 Technical Retreat.  Att. 1: Meeting Summary - Regional Temperature Project Technical Workgroup, May 22, 23, 2001 (Final 7/2/01).
306.	06/20/2001	E-mail to Geoffrey Poole, EPA, and 13 other recipients, from Dru Keenan, EPA, Subject: Final Meeting Notes for May 3rd.  Att. 1: Meeting Summary - Regional Temperature Project Technical Workgroup, May 3, 2001 (Final 6/13/01).
307.	05/31/2001	E-mail to Cathy Tortorici, NMFS, and 16 other recipients, from John Palmer, EPA, Subject: Agenda/Materials for Temp Policy Mtg (June 7).  Att. 1: Distribution of Temperature Approach to Water Temperature Criteria, Sally Sauter, 05/09/01. Att. 2: Sub-Basin Temperature Management Plan Option (A combined biological threshold and thermal potential approach), Debra, May 11, 2001. Att. 3: Sub-Basin Temperature Management Plan. Att. 4: Natural Thermal Potential, 6/1/01. Att. 5: Flow Chart for Distribution Threshold Approach. G. Poole, 5/30/01.
308.	05/15/2001	E-mail to Cathy Tortorici, NMFS, and 33 other recipients, from John Palmer, EPA, Subject: Meeting Summary for May 3 Temp Policy Mtg.  Att. 1: Meeting Summary for May 3, 2001, Pacific Northwest Temperature Project Policy Workgroup, May 15, 2001 version.

NO.	Date	Description
309.	04/17/2001	E-mail to Geoffrey Poole, EPA, and 13 other recipients, from Dru Keenan, EPA, Subject: ACTION ITEMS - Please Read.  Att. 1: Draft Flip Chart Notes from April 11, 2001 Technical Workgroup Meeting (4/16/01) [with handwritten notes]. Att. 2: Meeting Summary - Regional Temperature Project Technical Workgroup, March 7, 2001 (Final 4/16/01).
310.	03/29/2001	E-mail to Geoffrey Poole, EPA, and 15 other recipients, from Dru Keenan, EPA, Subject: Technical Workgroup Meeting Notes.  Att. 1: Meeting Summary - Regional Temperature Project Technical Workgroup, February 7, 2001 (Final 3/28/01). Att. 2: Draft Flip Chart Notes from March 7, 2001 Technical Workgroup Meeting (3/28/01).
311.	03/06/2001	E-mail to Geoffrey Poole, EPA, and 15 other recipients, from Dru Keenan, EPA, Subject: Final meeting summary for 2/1/01.  Att. 1: Meeting Summary - Regional Temperature Project Technical Workgroup, January 31 & February 1, 2001 (Final 3/06/01).
312.	01/29/2001	E-mail to Carl Schreck, Oregon State U, and 15 other recipients, from Dru Keenan, EPA, Subject: Meeting Summary for 1/4/01.  Att. 1: Meeting Summary - Regional Temperature Project Technical Workgroup, January 4, 2001 (Final 1/29/01). Att. 2: Missing. Att. 3: Missing. Att. 4: Missing.
313.	01/24/2001	E-mail to Patti Howard, Nez Perce, Rachel Friedman, NMFS, and Jan Pisano, NMFS, from Dru Keenan, EPA, Subject: Agenda for Jan 31st Temperature meeting.  Att. 1: Agenda - Temperature Criteria Development Project Technical Workgroup Retreat, January 31 and February 1, 2001. Att. 2: Missing.
314.	12/13/2000	Meeting Summary - Regional Temperature Project Technical Workgroup, November 7, 2000.
315.	11/30/2000	E-mail to Carl Schreck, OSU, and 15 other recipients, from Dru Keenan, EPA, Subject: Agenda for December 7th Technical Meeting.
316.	11/06/2000	EPA Pacific Northwest Regional Temperature-Criterion Development "System Potential" Conceptual Model.
317.	10/04/2000	E-mail to Carl Schreck, OSU, and 15 other recipients, from Dru Keenan, EPA, Subject: AGENDA for 10/12.
318.	08/25/2000	Meeting Summary for August 2, 2000, Pacific Northwest Temperature Project Policy Workgroup, August 25, 2001 version.
319.	07/19/2000	E-mail to Jason Dunham, USFS, and 16 other recipients, from Geoffrey Poole, EPA, Subject: Re: Subgroup conference call notes.
320.	07/19/2000	E-mail to Jason Dunham, USFS, from Geoffrey Poole, EPA, Subject: Subgroup conference call notes.
321.	07/13/2000	E-mail to Geoffrey Poole, EPA, and 5 other recipients, Subject: Final Ideal Characteristics for 7/14/call.
322.	07/12/2000	Meeting Summary for June 27, 2000, Pacific Northwest Temperature Project Policy Workgroup, July 12 version.
323.	07/05/2000	E-mail to Carl Schreck, Oregon State U, and 16 other recipients, from Dru Keenan, EPA, Subject: Meeting Notes and More.  Att. 1: Meeting Summary - Regional Temperature Project Technical Workgroup, June 6, 2000.
324.	04/07/2000	E-mail to Randy Smith, EPA, from Geoffrey Poole, EPA, forwarding article on fish extencions.
325.	03/01/2000	E-mail to Carl Schreck, Oregon State U, and 15 other recipients, from Dru Keenan, EPA, Subject: Agenda for 3/7/00 Temperature Mtg.
326.	[undated]	EPA Pacific Northwest Regional Temperature Criteria Development "System Potential" Conceptual Model.
327.	[undated]	Review of draft distribution issue paper by Sherri Johnson, EPA Contractor.

NO.	Date	Description
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**C. Other Documents**

NO.	Date	Description
328.	01/09/2003	E-mail to Geoffrey Poole, EPA, and 18 other recipients, from Dale McCullough, CRITFC, Subject: responses to comments.
329.	12/30/2002	E-mail to John Palmer, EPA, from Shelley Spalding, FWS, Subject: Re: Steps to Finalize the Temp Guidance.  Att. 1: Unsigned letter to John Iani, EPA, from FWS Regional Director, Re: Comments on Draft Temperature Guidance.
330.	11/18/2002	E-mail to John Palmer, EPA, from Shelley Spalding, FWS, Subject: Re: If you had one question for the peer review group.
331.	10/31/2002	E-mail to Debra Sturdevant, DEQ, from Dale McCullough, CRITFC, Subject: Re: RE: Looking for a few good studies.
332.	10/29/2002	E-mail to John Palmer, EPA, from Jason Dunham, USFS, Subject: Re: Looking for a few good studies.  Att. 1: Lobon-Cervia, Javier, and Pedro A. Rincon. 1998. Field Assessment of the Influence of Temperature on Growth Rate in a Brown Trout Population. Transactions of the American Fisheries Society 127:718-728. Att. 2: King, J. R., J. Shuter, and A. P. Zimmerman. 1999. Empirical Links between Thermal Habitat, Fish Growth, and Climate Change. Transactions of the American Fisheries Society 128:656-665. Att. 3: Brenkman, Samuel J., Gary L. Larson and Robert E. Gresswell. 2001. Transactions of the American Fisheries Society 130:981-987.
333.	09/06/2002	Technical Interpretation of Goal by Technical Workgroup.
334.	08/09/2002	Figures of 7-Day Temperature Statistic. [Author unknown].
335.	07/02/2002	E-mail to Geoffrey Poole, EPA, and 18 other recipients, from Dale McCullough, CRITFC, Subject: Peer Review-response to Elizabeth.  Att. 1: Bull Trout Peer Review Question Critique and Suggestions, July 2, 2002.
336.	06/20/2002	E-mail to Geoffrey Poole, EPA, and 18 other recipients, from Dale McCullough, CRITFC, Subject: 2 pdfs for peer reviewers.  Att. 1: Edsall, Thomas A., Anthony M. Frank, Donald V. Rottiers, and Jean V. Adams. 1999. The effect of temperature and ration size on the growth, body composition, and energy content of juvenile coho salmon. J. Great Lakes Res. 25(2):355-362. Att. 2: Elliott, J. M. and M. A. Hurley. 1999. A new energetics model for brown trout, <i>Salmo trutta</i> . Freshwater Biology 42: 235-246.
337.	05/21/2002	Modeled temperature figure for Klamath River Basin.
338.	05/09/2002	E-mail to Geoffrey Poole, EPA, and 11 other recipients, from Don Essig, DEQ, Subject: Re: Tech Workgroup Mtg.  Att. 1: Information on interannual variation in water temperature.
339.	05/08/2002	E-mail to Dru Keenan, EPA, and Jeffrey Lockwood, NMFS, from Dale McCullough, CRITFC, Subject: effects of warming on habitat.
340.	05/03/2002	Life History Information.
341.	04/30/2002	Fausch, K. D., C. E. Torgersen, C. V. Baxter, and H. W. Li. 2002. Landscapes to Riverscapes: Bridging the Gap between Research and Conservation of Stream Fishes. Bioscience 52 (6).
342.	04/05/2002	E-mail to Geoffrey Poole, EPA, and 16 other recipients, from Dale McCullough, CRITFC, Subject: Yakima R. data.  Att. 1: Selected Pages from TriCountyWaterResourceAgency/2-99-010/Assessment/Section5.doc., January 29, 2001. Att. 2: Yakima Subbasin Summary, Prepared for the Northwest Power Planning Council, 4/9/02 draft.

NO.	Date	Description
343.	04/05/2002	E-mail to Jeffrey Lockwood, NMFS, from Dale McCullough, CRITFC, Subject: info. for temp. as problem.  Att. 1: Methow and Okanogan Rivers Subbasin Salmon and Steelhead Production Plan, September 1, 1990.
344.	03/22/2002	E-mail to Jeffrey Lockwood, NMFS, from Dale McCullough, CRITFC, Subject: Mid-Col limiting factors.  Att. 1: Aquatic Species and Habitat Assessment: Wenatchee, Entiat, Methow, and Okanogan Watersheds.
345.	03/20/2002	E-mail to Jeffrey Lockwood, NMFS, from Dale McCullough, CRITFC, Subject: Fwd: Water temps on egg viability.  Att. 1: Missing.
346.	02/25/2002	E-mail to Dru Keenan, EPA, from Don Essig, DEQ, Subject: Selway/anti-deg.
347.	02/20/2002	E-mail to Dru Keenan, EPA, from Don Essig, DEQ, Subject: Idaho's Dissenting Opinion on RTCD criteria.  Att. 1: Letter to Dru Keenan, EPA, from Don Essig, DEQ, Subject: Idaho's dissenting opinion on temperature criteria recommended by the Regional Temperature Criteria Development Team: Technical Work Group (February 20, 2002 draft). Att. 2: Letter to Dru Keenan, EPA, from Don Essig, DEQ, Subject: Idaho's dissenting opinion on temperature criteria recommended by the Regional Temperature Criteria Development Team: Technical Work Group (February 22, 2002). Att. 3: Dissenting Opinion on Biological Threshold Numbers proposed by Regional Temperature Criteria Development Technical Workgroup.
348.	11/09/2001	Ebersole, Joseph, L. 2001. Heterogeneous Thermal Habitat for Northeast Oregon Stream Fishes. Doctoral dissertation. Oregon State University. Corvallis, Oregon.
349.	11/02/2001	Additional Questions for the Peer Review Panel 11.2.01.
350.	08/16/2001	E-mail to Geoffrey Poole, EPA, from John Risley, USGS, Subject: Inter annual temperature data.  Att. 1: Annual Variability Information.
351.	08/13/2001	Multiple Lines of Evidence Module, 8/13/01 Draft.
352.	08/13/2001	E-mail to Dale McCullough, CRITFC, from Don Essig, DEQ, Subject: Re: Inter-annual variability.
353.	08/13/2001	E-mail to Don Essig, DEQ, from Dale McCullough, CRITFC, Subject: Re: Inter-annual variability.
354.	08/02/2001	E-mail to Geoffrey Poole, EPA, and 13 other recipients, from Sally Sauter, USGS, Subject: Smoltification--from Zaugg.  Att. 1: Effect of Temperature on Parr-Smolt Transformation in Pacific Salmonids.
355.	08/01/2001	WTCTW. 2001. Scientific Issues Relating to Temperature Criteria for Salmon, Trout, and Char Native to the Pacific Northwest.
356.	07/24/2001	Smoltification. By Mark Hicks, Washington DOE.
357.	07/24/2001	E-mail to Marianne Deppman, EPA, and 13 other recipients, from Mark Hicks, WDOE, Subject: Smoltification.  Att. 1: Smoltification.
358.	06/11/2001	E-mail to Geoffrey Poole, EPA, and 35 other recipients, from Don Essig, DEQ, Subject: Measurement & metrics, part 2.  Att. 1: Graph of temperature metrics by Don Essig, Idaho DEQ.
359.	06/11/2001	Metric comparison Idaho 06-01. [Excel document.]
360.	05/24/2001	E-mail to Geoffrey Poole, EPA, and 16 other recipients, from Dale McCullough, CRITFC, Subject: levels of proof.

NO.	Date	Description
361.	05/22/2001	Graph of Temperature Metrics by Don Essig, Idaho DEQ.
362.	05/09/2001	Distribution of Temperature Approach to Water Temperature Criteria.
363.	04/06/2001	E-mail to Geoffrey Poole, EPA, and 14 other recipients, from Don Essig, DEQ, Subject: Re: Agenda for April 11 Technical Meeting.  Att. 1: Thermal Potential Approach. Att. 2: Natural Physical Potential as an Approach to Temperature Criteria.
364.	03/09/2001	E-mail to Cat Black, CRITFC, and 17 other recipients, from Dale McCullough, CRITFC, Subject: Re: Final Updated Fact Sheet.  Att. 1: Seven charts.
365.	02/12/2001	E-mail to Geoffrey Poole, EPA, and 9 other recipients, from Christopher Mebane, DEQ, Subject: Re: Sustainable Ecosystems Inc.
366.	XX/XX/2001	Figure 6 - Areas of spawning in the Methow River system. [Presented in Tech WG 2001]
367.	12/01/2000	E-mail to Shelley Spalding, FWS, from Jason Dunham, USFS, Subject: Re: How Much?, it depends...
368.	10/17/2000	Letter to Sherri Johnson, EPA Contractor, from Jason Dunham, USFS, Re: Peer Review.
369.	08/01/2000	Information on water temperature databases by John Risley, USGS.
370.	07/07/2000	E-mail to Geoffrey Poole, EPA, and 12 other recipients, from Dale McCullough, CRITFC, Subject: spatial/temporal issues in the std.
371.	05/28/2000	E-mail to Dale McCullough, CRITFC, and 9 other recipients, from Christopher Mebane, DEQ, Subject: Draft temp measurement issue discussion.  Att. 1: Issues Related to Temperature Measurement and Monitoring, May 25, 2000. [Att. 2: Missing]
372.	06/23/1998	Rocky Reach Background Biology by Don Chapman.
373.	[undated]	Figure: Life History - Productivity - Diversity, by Mobrand Consultants.
374.	[undated]	Figure 3 and 4. SNTEMP information.
375.	[undated]	System Potential: Is There a Role for Biology? Are There Different Levels of Resolution or "Filters" for Determining Criteria?
376.	[undated]	Return to River 2000.
377.	[undated]	Temperature lethal daily dose - by Mark Hicks Washington DOE.
378.	[undated]	Washington Forests and Fish CWA Assurances.
379.	[undated]	Clearwater Graphs.
380.	[undated]	Figures 1-5.
381.	[undated]	List of references.
382.	[undated]	System Potential Rewrite.
383.	[undated]	dft Response to OFIC_WFPA comments.
384.	[undated]	Annotated Bibliography: Information and Studies Relevant to Temperature, Salmonids, and Water Quality.
385.	[undated]	Example of Different SLS Spatial Applications [author unknown].
386.	[undated]	Temperature of Outflows at Hells Canyon Dam (current habitat) and Swan Falls Dam (historic habitat - Marsing Reach) [author unknown].
387.	[undated]	Feedback on EPA's Proposed Framework for Temperature Guidance [author unknown].
388.	[undated]	Distributional Thresholds Approach (Conservation Biology Emphasis).

NO.	Date	Description
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**D. Scientific Literature**

NO.	Date	Description
389.	2001	Ebersole, J. L., W. J. Liss, and C. A. Frissell. 2001. Relationship between stream temperature, thermal refugia and rainbow trout <i>Oncorhynchus mykiss</i> abundance in arid-land streams in the northwestern United States. <i>Ecology of Freshwater Fish</i> 2001: 10: 1-10.
390.	09/01/1990	Methow and Okanogan Rivers Subbasin Salmon and Steelhead Production Plan - excerpts.

**E. State of Oregon Documents**

NO.	Date	Description
391.	04/29/2003	E-mail to Robert C. Anderson, NMFS, and 14 other recipients, from Debra Sturdevant, DEQ, Subject: Final EPA Guidance. [EPA Final Guidance attached.]
392.	10/30/2002	E-mail to John Palmer, EPA, and 13 other recipients, from Debra Sturdevant, DEQ, Subject: RE: Looking for a few good studies.
393.	08/09/2002	Excel document - Average Temps Oregon 08-09-02 by ODEQ.xls
394.	04/23/2002	E-mail to Robert C. Anderson, NMFS and 13 other recipients, from Debra Sturdevant, DEQ, Subject: Update and Status.  Att. 1: Draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: State of Oregon Comments on the Draft Guidance on State and Tribal Temperature Water Quality Standards, dated October 31, 2001.
395.	05/11/2001	Sub-Basin Temperature Management Plan Option (A combined biological threshold and thermal potential approach).
396.		E-mail to Jeffrey Lockwood, NMFS, from Debra Sturdevant, DEQ, Subject: FW: My notes from the temperature peer review meeting.  Att. 1: Notes from the Regional Temperature Peer Review Meeting, February 13 and 14, at Oregon DEQ. (Chris Mebane).
397.	05/07/1999	EPA Region 10 Temperature Criteria Standard Development Proposal: 14 April 1999 (DRAFT).
398.	03/16/1999	Regional Temperature Standard Review and Development, Oregon State University.



<b>INDEX OF DOCUMENTS EXCLUDED FROM THE FOURTH AMENDED ADMINISTRATIVE RECORD</b> <b>For National Marine Fisheries Service's February 24, 2004, Biological Opinion on EPA's Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen and Antidegradation Implementation Methods, Including Temperature Guidance Project</b>  <b>November 6, 2009</b>  <b>Northwest Environmental Advocates v. U.S. EPA et al., Civ. No. 05-1876 HA</b>			
<b>Excluded from Biological Opinion Record</b>			
<b>A. NMFS Documents</b>			
<b>NO.</b>	<b>Date</b>	<b>Description</b>	<b>Reason for Excluding</b>
1.	02/23/2004	E-mail to Robert C. Anderson, NMFS, and Jeffrey Lockwood, NMFS, from Melanie Rowland, NOAA GCNW, providing comments on draft biological opinion	Attorney-client communication, attorney work product, deliberative.
2.	02/23/2004	E-mail to Jeffrey Lockwood, NMFS, cc: Robert C. Anderson, NMFS, Michael Tehan, NMFS, Cathy Tortorici, NMFS, and Russ Strach, NMFS, from Melanie Rowland, NOAA GCNW; e-mail chain between Rowland, Lockwood, and Anderson discussing additional revisions to portion of draft biological opinion.	Attorney-client communication, attorney work product, deliberative.
3.	02/23/2004	Draft passages for draft biological opinion - staff recommendations for text insertions/changes/deletions to various sections of draft biological opinion (unidentified author) .	Deliberative.
4.	02/20/2004	E-mail to Robert C. Anderson, NMFS, Michael Tehan, NMFS, Jeffrey Lockwood, NMFS, Russ Strach, NMFS, Cathy Tortorici, NMFS, and Melanie Rowland, NOAA GCNW, from Robert C. Anderson, NMFS, discussing take issues re draft ITS.	Attorney-client communication, deliberative.
5.	02/20/2004	E-mail to Melanie Rowland, NOAA GCNW, and Jeffrey Lockwood, NMFS, from Robert C. Anderson, NMFS, seeking comments on draft portion of biological opinion.  Attachment: Draft section of biological opinion	Attorney-client communication, deliberative.
6.	02/19/2004	E-mail to Melanie Rowland, NOAA GCNW, Dru Keenan, EPA, Cathy Tortorici, NMFS, Robert C. Anderson, NMFS, John Palmer, EPA, from Jeffrey Lockwood, NMFS, discussing take issues re draft ITS and seeking legal advice re same.	Attorney-client communication, deliberative.
7.	02/19/2004	E-mail to Melanie Rowland, NOAA GCNW, Robert C. Anderson, NMFS, and Cathy Tortorici, NMFS, from Jeffrey Lockwood, NMFS, responding to e-mail from Rowland to Lockwood proving advice re take issues re draft ITS (includes previous 2/19/04 e-mail).	Attorney-client communication, attorney work product, deliberative.
8.	02/19/2004	E-mail to Robert C. Anderson, NMFS, Tracy Schaerer, NMFS, Michael Tehan, NMFS, David Mabe, NMFS, Russ Strach, NMFS, Melanie Rowland, NMFS Attorney, Office General Counsel Northwest (GCNW), cc: Betty Webb, NMFS, and Cathy Tortorici, NMFS, from Jeffrey Lockwood, NMFS, requesting legal and supervisor review of draft section of the biological opinion, including Att. 1: Integration and Synthesis of Effects.	Attorney-client communication; deliberative.
9.	02/18/2004	E-mail to Mike Crouse, NMFS, cc: David Mabe, NMFS, Cathy Tortorici, NMFS, Jeffrey Lockwood, NMFS, Russ Strach, NMFS, and Melanie Rowland, NMFS GCNW, from Michael Tehan, NMFS, responding to email from Lockwood to Tortorici and Tehan, cc: Gary Sims, NMFS, Ritchie Graves, NMFS, and Robert Anderson, NMFS; internal e-mail discussion re potential means of responding to tribal request for consultation related to Idaho water quality standards and consistency between Idaho/Oregon standards.	Deliberative.
10.	02/17/2004	E-mail to Robert C. Anderson, NMFS, Cathy Tortorici, NMFS, Melanie Rowland, NOAA GCNW, and Thomas Hooper, NMFS, from Jeffrey Lockwood, NMFS, with draft portion of ITS, seeking comments.	Attorney-client communication, deliberative.
11.	02/17/2004	E-mail to Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, and Thomas Hooper, NMFS, from Melanie Rowland, NOAA GCNW, attaching comments on draft ITS.	Attorney-client communication, attorney work product, deliberative.
12.	02/17/2004	E-mail to Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, and Thomas Hooper, NMFS, from Melanie Rowland, NOAA GCNW, providing additional comments on draft ITS (attached).	Attorney-client communication, attorney work product, deliberative.



NO.	Date	Description	Reason for Excluding
12a.	02/13/2004	Att. 1: Endangered Species Act - Section 7 Consultation Biological Opinion.***  Redacted: See AR Document No. 2b (note: the withheld portion of this document is identical to the withheld portion of AR Document No. 5b/Excluded Document No. 25)	
14.	02/12/2004	E-mail to Melanie Rowland, NOAA GCNW, Jeffrey Lockwood, NMFS, Russ Strach, NMFS, and Cathy Tortorici, NMFS, from Mike Tehan, NMFS, responding to email from Rowland re letter to NMFS from Melissa Powers, Pacific Env. Advocacy Center, commenting on proposed action; also contains email chain from Lockwood to Rowland re substance of ITS.	Attorney-client communication and attorney work product.
15.	02/12/2004	E-mail to Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, and Russ Strach, NMFS, from Melanie Rowland, NOAA GCNW, containing legal advice re ITS.	Attorney-client communication, attorney work product.
16.	02/09/2004	Fax to Jeffrey Lockwood, NMFS, from Melanie Rowland, NOAA GCNW, containing handwritten comments on draft biological opinion.	Attorney-client communication, attorney work product, deliberative.
17.	02/09/2004	E-mail to Jeffrey Lockwood, NMFS, and Robert C. Anderson, NMFS, from Melanie Rowland, NOAA GCNW, providing comments on portion of draft biological opinion.  Attachment: Red-line comments on portion of draft biological opinion.	Attorney-client communication, attorney work product, deliberative.
18.	02/09/2004	E-mail to Jeffrey Lockwood, NMFS, from Melanie Rowland, NOAA GCNW, responding to e-mail from Lockwood to Rowland requesting review of portion of the biological opinion.	Attorney-client communication, attorney work product, deliberative.
19.	02/09/2004	E-mail to Jeffrey Lockwood, NMFS, and Robert C. Anderson, NMFS, from Melanie Rowland, NOAA GCNW, providing legal advice re substance of ITS.	Attorney-client communication, attorney work product.
20.	02/09/2004	E-mail to Melanie Rowland, NOAA GCNW, cc: Robert C. Anderson, NMFS, Michael Tehan, NMFS, Russ Strach, NMFS, Cathy Tortorici, NMFS, and Marc Liverman, NMFS, from Jeffrey Lockwood, NMFS, seeking comments on portion of draft biological opinion.	Attorney-client communication, attorney work product, deliberative.
22.	02/08/2004	E-mail to Jeffrey Lockwood, NMFS, and Robert C. Anderson, NMFS, from Melanie Rowland, NOAA GCNW, providing comments on draft biological opinion.	Attorney-client communication, attorney work product, deliberative.
23.	02/08/2004	Draft Letter to Randall F. Smith, EPA from D. Robert Lohn, NMFS, Re: Biological Opinion on EPA's Proposed Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods (draft biological opinion transmittal letter with inserted staff question re additional information needed).  Att. 1: Endangered Species Act - Section 7 Consultation Biological Opinion & Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation: EPA's Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods (draft of biological opinion with inserted staff questions identifying additional information needed/areas needing clarification).	Deliberative
24.	02/06/2004	Predecisional draft (redline) section of biological opinion: Integration and Synthesis of Effects (unidentified author).	Deliberative
25.	02/05/2004	Att. 1: Endangered Species Act - Section 7 Consultation Biological Opinion & Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation: EPA's Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods (draft of biological opinion with inserted staff comments and questions).  Redacted: See AR Document No. 5b.	Deliberative

NO.	Date	Description	Reason for Excluding
26.	02/02/2004	Att. 1: Endangered Species Act - Section 7 Consultation Biological Opinion & Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation: EPA's Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods (draft of biological opinion with inserted staff comments and questions).  Redacted: See AR Document No. 6a.	Deliberative.
27.	01/28/2004	Draft passages (incidental take statement) for draft biological opinion with staff comments inserted, containing questions and suggestions (e.g. "options to consider") (unidentified author).	Deliberative.
29.	01/09/2004	NMFS draft document/outline entitled "Suggested DEQ Conservation Measures" identifying potential conservation measures for inclusion in biological opinion and what would be needed from DEQ to implement the suggested measures (unidentified author).	Deliberative.
30.	12/30/2003	Att. 1: Endangered Species Act - Section 7 Consultation Biological Opinion & Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation: EPA's Approval of Revised Oregon Water Quality Standards for Temperature, Intergravel Dissolved Oxygen, and Antidegradation Implementation Methods (draft biological opinion with substantial staff comments and questions, indicating areas where additional information is needed or questions remain).  Redacted: see AR Document No. 9a.	Deliberative.
31.	12/18/2003	E-mail to Robert C. Anderson, NMFS, Melanie Rowland, NOAA GCNW, and Cathy Tortorici, NMFS, from Jeffrey Lockwood, NMFS, seeking legal review of draft portion of biological opinion.  Attachment: Dec. 18, 2003 Predecisional Draft	Attorney-client communication, deliberative.
32.	12/18/2003	E-mail to Jeffrey Lockwood, NMFS, from Melanie Rowland, NOAA GCNW, responding to forwarded email from Marylou Soscia, EPA, to Dru Kennan, EPA, cc: Cathy Tortorici, NMFS, Elizabeth Materna, FWS, Jeff Kopf, EPA, Jeffrey Lockwood, NMFS, John Palmer, EPA, Kellie Kubena, EPA, Melanie Rowland, NOAA GCNW, Robert Anderson, NMFS, re funding issues.	Attorney-client communication, deliberative.
33.	12/17/2003	E-mail to Dru Keenan, EPA, Jeff Kopf, EPA, Elizabeth Materna, FWS, Robert C. Anderson, NMFS, John Palmer, EPA, Mary Lou Soscia, EPA, Kellie Kubena, EPA, Melanie Rowland, NOAA GCNW, and Cathy Tortorici, NMFS, from Jeffrey Lockwood, NMFS, also including email from Lockwood summarizing legal advice from Rowland regarding draft section of biological opinion; Att. 1, Dec. 16, 2003 Re-Draft of Conservation Measures by J. Lockwood, preliminary draft section of biological opinion containing inserted author's comments and questions+G40.	Attorney-client communication; deliberative.
34.	12/16/2003	E-mail to Melanie Rowland, NOAA GCNW, Cathy Tortorici, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: seeking legal review of draft conservation measures.  Attachments: (1) Dec. 16, 2003 Re-draft of conservation measures (redline strikeout), (2) Dec. 16, 2003 Re-draft of conservation measures.	Attorney-client communication, deliberative.
35.	12/10/2003	E-mail to Melanie Rowland, NOAA GCNW, Robert C. Anderson, NMFS, and Cathy Tortorici, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: Possible Conservation Measures, with rationale; contains email from Rowland to Lockwood re legal issues re draft conservation measures.  Attachment: Pre-Decisional Draft EPA conservation measures with NOAA Fisheries draft analysis.	Attorney-client communication, attorney work product, deliberative.
36.	12/10/2003	E-mail to Dru Keenan, EPA, John Palmer, EPA, Robert C. Anderson, NMFS, cc: Mary Lou Soscia, PEA, Cathy Tortorici, NMFS, and Elizabeth Materna, FWS, from Jeffrey Lockwood, NMFS, containing revised redrafted summary of possible conservation measures; Att. 1: Draft EPA Conservation Measures with NOAA Fisheries Draft Analysis - December 10, 2003 third re-draft; contains preliminary draft of conservation measures with NOAA staff analysis, including inserted comments and questions.	Deliberative.

NO.	Date	Description	Reason for Excluding
37.	12/09/2003	E-mail to Mary Lou Soscia, EPA, cc: Cathy Tortorici, NMFS, Dru Keenan, EPA, Elizabeth Materna, FWS, John Palmer, EPA, Melanie Rowland, NOAA GCNW, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, containing summary of preliminary draft of EPA Conservation Measures and providing NOAA staff commentary and suggestions regarding the draft measures (subject: Second ReDraft: Possible Conservation Measures).	Deliberative.
37a.	12/05/2003	Email from Jeff Lockwood, NMFS, to Marylou Soscia, EPA, cc: Cathy Tortorici, NMFS, Dru Keenan, EPA, Elizabeth Materna, FWS, John Palmer, EPA, Subject: Re: Possible Conservation Measures; email chain discussing possible conservation measures and legal issues regarding framework for implementation of measures.***	Deliberative.
38.	12/03/2003	E-mail to Michael Tehan, NMFS, Cathy Tortorici, NMFS, cc: Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, briefing re EPA reaction to Preliminary Draft List of Issues for DEQ Implementation Letter (related to possible conservation measures) (attached e-mail from Lockwood to Mark Charles and Debra Sturdevant, Or. DEQ, contained in AR at No. 10).	Deliberative.
39.	11/21/2003	Predecisional draft, Provisions in Proposed Oregon DEQ Water Quality Criteria Needing Clarification or Interpretation (November 20, 2003 draft by J. Lockwood, NOAA Fisheries; November 21, 2003 responses from EPA); list of NOAA staff member's questions seeking clarification on issues related to effects of proposed water quality criteria revisions with inserted responses by EPA staff member.	Deliberative.
40.	11/14/2003	E-Mail to Dru Keenan, EPA, cc: Elizabeth Materna, FWS, Robert C. Anderson, NMFS, Michael Tehan, NMFS, Cathy Tortorici, NMFS, and Melanie Rowland, NOAA GCNW, from Jeffrey Lockwood, summarizing potential consultation issues needing clarification; Att. 1: Potential ESA and MSA Consultation Issues - EPA and DEQ Proposed Water Quality Standards, November 14, 2003, is a list of issues, by J. Lockwood, NOAA Fisheries, describing areas where additional information or clarification is needed or additional tasks are necessary to move forward with biological opinion analysis.	Deliberative.
41.	11/13/2003	Predecisional draft staff questions and comments on EPA/DEQ proposed rules, November 13, 2003 comments by J. Lockwood, NOAA Fisheries, containing staff opinions and identifying issues needing clarification.	Deliberative.
42.	11/04/2003	E-mail to Jeffrey Lockwood, NMFS, cc: James Ruff, NMFS, and Lynne Krasnow, NMFS, from Ritchie Graves, NMFS, providing staff member's opinion and questions responding to internal email seeking comment on DEQ proposal on application of its proposed rules, as stated in e-mail from Debra Sturdevant, Or. DEQ, to John Palmer, EPA, Jeff Lockwood, NMFS, Dru Keenan, EPA, and Robert Anderson, NMFS, dated 11/4/03 (contained in AR at No. 172), re agreement to apply spawning for fall Chinook in Snake River.	Deliberative.
45.	09/02/2003	E-mail to Dru Keenan, EPA, cc: Robert C. Anderson, NMFS, Chris Mebane, NMFS, and John Palmer, EPA, from Jeffrey Lockwood, NMFS, Subject: 16 vs. 18, discussion/recommendation re setting up process for gathering data to evaluate application of 16C criteria.	Deliberative.
46.	08/22/2003	Comments on Analysis of Effects for Chinook Salmon.	Deliberative.
48.	07/22/2003	E-mail from Chris Mebane to Robert Anderson and Jeffrey Lockwood discussing assumptions of warming and cooling re spawning, tentative plan re spawning designation process, containing author's questions and concerns (duplicate of Excluded Document No. 50).  Redacted: see AR Document No. 40a.	Deliberative.
49.	07/22/2003	Email to Chris Mebane, NMFS, cc: Robert C. Anderson, NMFS, and John Palmer, EPA, from Jeffrey Lockwood, NMFS, discussing unresolved nature of NOAA position re spawning uses and additional information and analysis needed (reply to email from Mebane to Anderson and Lockwood, Excluded Document No. 50).	Deliberative.
50.	07/22/2003	E-mail to Robert C. Anderson, NMFS, and Jeffrey Lockwood, NMFS, from Chris Mebane, NMFS (see 7/22/2003 entry above).	Deliberative.

NO.	Date	Description	Reason for Excluding
58.	06/24/2003	E-mail to Jeffrey Lockwood, NMFS, from Richard Domingue, NMFS, Subject: Re: language [NOTE: this record was mistakenly included on this Index of Excluded Documents; this document is not related to the February 24, 2004 Biological Opinion, but instead concerns an unrelated ESA consultation with the Corps of Engineers; this document is being removed from NMFS's file for this project.]	
59.	04/08/2003	E-mail to Melanie Rowland, NOAA GCNW, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, forwarding email from Dru Keenan, EPA, discussing options for moving forward with use designations as to rearing and interpretation/application of NWEA decision.	Deliberative.
60.	04/07/2003	E-mail to Melanie Rowland, NMFS GCNW, Robert C. Anderson, NMFS, Paula Van Haagen, EPA, and Dru Keenan, EPA, from Jeffrey Lockwood, NMFS, requesting legal advice re interpretation of Court order.	Attorney-client communication.
61.	08/02/2002	Memorandum to Chris Torgersen, USGS, from Jeffrey Lockwood, NMFS, Subject: Request for presentation.	Deliberative.
<b>B. EPA Documents</b>			
NO.	Date	Description	Reason for Excluding
66.	02/23/2004	E-mail to Robert C. Anderson, NMFS, Cathy Tortorici, NMFS, Dru Keenan, EPA, Jeffrey Lockwood, NMFS, John Palmer, EPA, Melanie Rowland, NOAA GCNW, Michael Tehan, NMFS, Robert C. Anderson, NMFS, and Russ Strach, NMFS, from Jeff Kopf, EPA Assistant Regional Counsel providing comments (redline/str keout) on draft ITS.  Attachments: (1) Feb. 20, 2004 Predecisional draft (clean version), (2) Feb. 20, 2004 Predecisional draft (redline version).	Attorney-client communication, attorney work product, deliberative.
67.	02/20/2004	E-mail to Jeffrey Lockwood, NMFS, Cathy Tortorici, NMFS, John Palmer, EPA, Melanie Rowland, NOAA GCNW, Robert C. Anderson, NMFS, and Jeff Kopf, EPA, from Dru Keenan, EPA, responding to 2/19/04 e-mail (above) from Lockwood to Rowland discussing take issues re ITS and seeking legal advice re same.	Attorney-client communication, deliberative.
68.	02/19/2004	E-mail to Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, John Palmer, EPA, and Jeff Kopf, EPA, from Dru Keenan, EPA, containing NOAA staff comments and questions in text and providing Keenan handwritten comments on predecisional draft section of biological opinion/incidental take statement.	Deliberative.
69.	02/13/2004	E-mail to Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, cc: Dru Keenan, EPA, John Palmer, EPA, Mary Lou Soscia, EPA, Adrienne Allen, EPA counsel, Keith Cohon, EPA, Mary Ellen Levine, EPA, and Kellie Kubena, EPA, from Jeff Kopf, EPA, containing EPA staff member's draft suggestions for EFH section of biological opinion with explanation of EPA concerns.	Deliberative.
70.	02/12/2004	Fax to Dru Keenan, EPA, from Jeff Kopf, EPA Assistant Regional Counsel, Subject: Comments on draft NOAA Fisheries BO (contains hand-written comments on portion of draft biological opinion).	Attorney work product, deliberative.
71.	01/22/2004	E-mail to Robert C. Anderson, NMFS, Cathy Tortorici, NMFS, Elizabeth Materna, FWS, cc: Mary Lou Soscia, EPA, Dru Keenan, EPA, Jeff Kopf, EPA, and Steve Ellis, EPA, from John Palmer, EPA, containing proposed biological opinion language re conservation measures and describing discussion with Melanie Rowland, NMFS counsel, re same.	Attorney work product, deliberative.
72.	01/13/2004	E-mail to Cathy Tortorici, NMFS, John Palmer, EPA, and Paula Van Haagen, EPA, from Mary Lou Soscia, EPA, containing internal discussion re status of consultation and plan to address open issues.	Deliberative.
73.	11/18/2003	E-mail to Elizabeth Materna, FWS, Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, John Palmer, EPA, Keith Cohon, EPA, Adrienne Allen, EPA attorney, Marylou Soscia, EPA, Kellie Kubena, EPA, Jeff Kopf, EPA Assistant Regional Counsel, from Dru Keenan, EPA, containing notes from 11/17 call with Services on issues to be addressed to clarify Oregon rule and requesting comments re same. [Entry added March 26, 2008.]	Attorney-client communication, deliberative.

NO.	Date	Description	Reason for Excluding
<b>Excluded from Temperature Guidance Record</b>			
<b>A. NMFS Documents</b>			
NO.	Date	Description	Reason for Excluding
75.	04/15/2003	Draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, with redline/strikeout edits by J. Lockwood, Re: EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards, preliminary draft of NMFS's policy position/comments concerning Temperature Guidance and potential applicability to ESA section 7 consultations; inserted text suggested by staff.	Deliberative
75a.	04/14/2003	E-mail to Jeffrey Lockwood, NMFS, cc: Russ Strach, NMFS, and Melanie Rowland, NOAA GCNW, from Bob Lohn, NMFS, Subject: Re: temperature letter, discussing policy issues related to NMFS's position/comment letter on Temperature Guidance and discussing proposed changes, with an attached e-mail to Russ Strach, NMFS, and Bob Lohn, NMFS, from Jeff Lockwood, NMFS, identifying issues needing clarification and providing comments re: earlier draft of same letter. [Entry added March 26, 2008.]	Deliberative
77.	04/09/2003	"Predecisional, Internal Deliberative Document"; preliminary draft of letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards, with staff commentary raising issues to be addressed by J. Lockwood.  Encl. 1: Draft Recommendations for ESA and MSA Consultations on EPA approval of Water Temperature Standards (contained in AR Document No. 239 as Enclosure 2).	Deliberative
78.	04/09/2003	"Predecisional, Internal Deliberative Document"; draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, with redline edits, Re: EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards, with staff commentary raising issues to be address re final draft of Temperature Guidance.  Redacted: See AR Document No. 234c.	Deliberative
79.	03/31/2003	"Predecisional, Internal Deliberative Documents"; Draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, with redline edits and commentary by Jeffrey Lockwood, Re: EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards, containing comments on final draft of Temperature Guidance.  Encl. 1: Draft Recommendations for ESA and MSA Consultations on EPA approval of Water Temperature Standards (contained in AR Document No. 239 as Enclosure 2).	Deliberative
80.	03/31/2003	"Predecisional, Internal Deliberative Document, Attorney-Client Privileged"; Draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, with inserted staff commentary/questions by Jeffrey Lockwood, Re: EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards, containing NMFS comments on Temperature Guidance.  Encl. 1: Draft Recommendations for ESA and MSA Consultations on EPA approval of Water Temperature Standards (see entry above, AR Document No. 239).	Deliberative
81.	03/31/2003	E-mail to John Palmer, EPA, cc: Russ Strach, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: protecting cold waters, providing NMFS staff member proposal for revised language to NMFS comment letter on final version of Temperature Guidance.	Deliberative

NO.	Date	Description	Reason for Excluding
82.	03/31/2003	E-mail to John Palmer, EPA, cc: Russ Strach, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: Moving forward, raising NMFS staff member's issues and concerns related to draft NMFS letter on final version of Temperature Guidance.	Deliberative
83.	03/31/2003	E-mail to Cathy Tortorici, NMFS, Robert C. Anderson, NMFS, Thomas Hooper, NMFS, Ed Murrell, NMFS, Brian Brown, NMFS, and Mark Schneider, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: 'temperature guidance letter']], forwarding email chain between Melanie Rowland, Attorney, NOAA Office of General Counsel Northwest (GCNW), and Bob Lohn, NMFS, and NMFS staff containing legal advice re substance of draft NMFS comment letter on Temperature Guidance.	Attorney-Client, Work Product, Deliberative
84.	03/28/2003	E-mail to Bob Lohn, NMFS, Jeffrey Lockwood, NMFS, Russ Strach, NMFS, Mike Crouse, NMFS, and Joe Scordino, NMFS, from Melanie Rowland, NOAA GCNW, Subject: Re: [Fwd: 'temperature guidance letter']; response to email from Lohn to Rowland (6/13/02) providing legal advice re interplay of ESA/CWA requirements.	Attorney-Client, Work Product, Deliberative
85.	03/27/2003	E-mail to Jeffrey Lockwood, NMFS, Russ Strach, NMFS, Robert C. Anderson, NMFS, Thomas Hooper, NMFS, Ed Murrell, NMFS, and Melanie Rowland, NMFS GCNW, from Cathy Tortorici, NMFS, Subject: My comments on point 1 and a suggestion, responding to 3/27/03 email from Lockwood to Strach, cc: Rowland and NMFS staff, providing additional suggestions re edits to draft NMFS comment letter on Temperature Guidance.	Attorney-Client, Deliberative
86.	03/27/2003	E-mail to Russ Strach, NMFS, cc: Robert C. Anderson, NMFS, Thomas Hooper, NMFS, Ed Murrell, NMFS, Melanie Rowland, NOAA GCNW, and Cathy Tortorici, NMFS, from Jeffrey Lockwood, NMFS, Subject: point 1 - temp. letter, suggesting revisions to draft NMFS comment letter on Temperature Guidance.	Attorney-Client, Deliberative
87.	03/27/2003	Early (embryonic) draft of letter to John Iani, EPA, from NMFS, providing NMFS position/comments on final Temperature Guidance.	Deliberative
88.	03/26/2003	E-mail to Russ Strach, NMFS, cc: Melanie Rowland, NOAA GCNW, and Mike Crouse, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: [Fwd: 'temperature guidance letter'], responding to email from Rowland to Lohn containing legal analysis re applicability of water quality standards and comments on draft NMFS comment letter on Temperature Guidance.	Attorney-Client, Work Product, Deliberative
89.	03/26/2003	E-mail to Ed Murrell, NMFS, Thomas Hooper, NMFS, and Robert C. Anderson, NMFS, from Jeff Lockwood, NMFS, Subject: [Fwd: 'temperature guidance letter'], email chain responding to email from Bob Lohn, NMFS Regional Administrator, to Jeff Lockwood, Russ Strach, and Mike Crouse, NMFS, and Melanie Rowland, NOAA counsel, discussion elements of NMFS position/comment letter on final Temperature Guidance, debating issues to be addressed in the letter, and discussing additional revisions and clarifications to letter.	Deliberative
90.	03/25/2003	E-mail to Robert C. Anderson, NMFS, Ed Murrell, NMFS, and Thomas Hooper, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: 'temperature guidance letter'], email describing proposed changes to draft NMFS comment letter on final Temperature Guidance and suggesting further review and clarification of NMFS's position on the Guidance.  Att. 1: Early draft (later substantially revised) of letter to John (Palmer), EPA, from NMFS providing position/comments on final Temperature Guidance, unidentified author.	Deliberative
91.	03/25/2003	E-mail to Bob Lohn, NMFS, Russ Strach, NMFS, Mike Crouse, NMFS, and Melanie Rowland, NOAA GCNW, from Jeffrey Lockwood, NMFS, Subject: Re: 'temperature guidance letter,' containing additional discussion re draft NMFS comment letter on Temperature Guidance.	Attorney-Client, Deliberative



NO.	Date	Description	Reason for Excluding
92.	03/21/2003	E-mail to John Palmer, EPA, cc: Russ Strach, NMFS, Thomas Hooper, NMFS, Ed Murrell, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: warm conditions, replying to email from Palmer, reflecting internal discussion re portion of draft Temperature Guidance dealing with unusually warm water and suggested changes to Guidance to address concerns raised by NMFS staff member.	Deliberative
93.	03/20/2003	E-mail to Bob Lohn, NMFS, Mike Crouse, NMFS, and Russ Strach, NMFS, from Jeffrey Lockwood, NMFS, Subject: EPA temperature project - 2 new paragraphs, staff member's suggested revisions to NMFS position/comment letter on final Temperature Guidance seeking review and comments re accuracy of information presented.	Deliberative
94.	03/20/2003	E-mail to Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: new draft paragraphs, containing staff commentary and raising additional questions/issues regarding proposed revisions to draft NMFS comment letter.	Deliberative
95.	03/20/2003	E-mail to Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: new draft paragraphs, discussing proposed revisions to draft NMFS comment letter on Temperature Guidance, raising additional issues needing clarification.	Deliberative
96.	03/20/2003	E-mail to Russ Strach, NMFS, Robert C. Anderson, NMFS, Ed Murrell, NMFS, Thomas Hooper, NMFS, John Palmer, EPA, cc: Mark Schneider, NMFS, from Jeffrey Lockwood, NMFS, Subject: new draft paragraphs, seeking review and comments regarding suggested draft language for draft NMFS comment letter on Temperature Guidance (see Excluded Document No. 95).	Deliberative
97.	03/17/2003	E-mail to Russ Strach, NMFS, Robert C. Anderson, NMFS, cc: Thomas Hooper, NMFS, Ed Murrell, NMFS, Blane Bellerud, NMFS, and Brian Brown, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: Comment on temp guide], forwarding email from Walt Dickhoff, NMFS to Bob Lohn, NMFS, cc: NMFS staff, providing NMFS staff comments and suggestions on draft temperature criteria (see 3/14/03 email from Dickhoff to Kratz et al.).	Deliberative
99.	03/17/2003	E-mail to Bob Lohn, NMFS, Patti Vandeta, NMFS, Russ Strach, NMFS, Mike Crouse, NMFS, Michael Tehan, NMFS and Melanie Rowland, NOAA GCNW, from Jeffrey Lockwood, NMFS, re draft comment letter for temperature guidance, forwarding draft comment letter for review and internal discussion.  Att.1: "Predecisional, Internal Deliberative Document"; Draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002, draft EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards (March 14, 2003 comments by J. Lockwood), containing draft NMFS comments on Temperature Guidance.	Attorney-Client, Deliberative
100.	03/14/2003	E-mail to Walt Dickhoff, NMFS, and Kim Kratz, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: Review of temperature guidance, responding to draft version of 3/14/03 email from Dickhoff to Kratz et al., containing internal discussion and raising issues and concerns regarding the proposed temperature guidelines and rearing temperature criteria.	Deliberative
101.	03/13/2003	"Predecisional, Internal Deliberative Document, Attorney-Client Privileged"; Draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002, draft EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards, draft of NMFS comment/position letter based on draft version of Temperature Guidance with staff member's suggested redline/strikethrough revisions and comments.  Redacted: See AR Document No. 236a.	Deliberative

NO.	Date	Description	Reason for Excluding
102.	03/13/2003	E-mail to Melanie Rowland, NOAA GCNW, cc: Russ Strach, NMFS, Robert C. Anderson, NMFS, Ed Murrell, NMFS, Thomas Hooper, NMFS, and Michael Tehan, NMFS, from Jeffrey Lockwood, NMFS, re draft comment letter, seeking legal review of draft NMFS comment letter on Temperature Guidance.  Att. 1: "Predecisional, Internal Deliberative Document, Attorney-Client Privileged"; Draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002, draft EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards (March 13, 2003 comments by J. Lockwood), containing draft NMFS comments on Temperature Guidance.	Attorney-Client, Deliberative
103.	03/13/2003	E-mail to Jeffrey Lockwood, NMFS, cc: Russ Strach, NMFS, Thomas Hooper, NMFS, and Robert Anderson, NMFS, from Melanie Rowland, NOAA GCNW, re rewrite of 2 paragraphs, responding to 3/13/03 email from Lockwood with revised paragraphs for draft NMFS comment letter.	Attorney-Client, Work Product, Deliberative
104.	03/13/2003	E-mail to Melanie Rowland, NOAA GCNW, Russ Strach, NMFS, cc: Thomas Hooper, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, re rewrite of 2 paragraphs, containing revisions to draft NMFS comment letter on Temperature Guidance.	Attorney-Client, Deliberative
105.	03/12/2003	E-mail to Melanie Rowland, NOAA GCNW, Michael Tehan, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: your copy of memo to science center, forwarding attachment.  Att. 1: Memorandum to Dr. Walton Dickhoff, NMFS, from Jeffrey Lockwood, NMFS, Subject: EPA Region 10 guidance for Pacific Northwest states and tribal temperature water quality standards, providing background information, outlining unresolved issues/areas needing clarification, and seeking input re temperature effects/food availability.	Attorney-Client, Deliberative
106.	03/12/2003	Att. 1: Memorandum to Dr. Walton Dickhoff, NMFS, from Jeffrey Lockwood, NMFS, Subject: EPA Region 10 guidance for Pacific Northwest states and tribal temperature water quality standards, providing background, outlining unresolved issues/areas needing clarification, and requesting comments on draft Temperature Guidance with respect to water temperature preferences and food availability.  Redacted: See AR Document No. 236b.	Deliberative
107.	03/12/2003	Memorandum to Walton Dickhoff, NMFS, from Jeffrey Lockwood, NMFS, Subject: EPA Region 10 guidance for Pacific Northwest states and tribal temperature water quality standards, providing background information, outlining unresolved issues/areas needing clarification, and requesting comments on draft Temperature Guidance with respect to water temperature preferences and food availability.  Redacted: See AR Document No. 236c.	Deliberative
108.	03/12/2003	Briefing memorandum to Robert Lohn, NMFS, from Jeffrey Lockwood, NMFS, re March 12, 2003 meeting to discuss NOAA Fisheries' comment letter on EPA Regional Water Temperature Criteria Guidance, summarizing status of issues needing resolution for NMFS comment/position letter on Temperature Guidance.	Deliberative
109.	03/12/2003	E-mail to Bob Lohn, NMFS, Mike Crouse, NMFS, Russ Strach, NMFS, Melanie Rowland, NOAA GCNW, Robert C. Anderson, NMFS, and Michael Tehan, NMFS, from Jeffrey Lockwood, NMFS, Subject: CORRECTION: briefing material for 3/12 temperature meeting, re-forwarding briefing materials (see 3/11/03 email from Lockwood to Lohn).  Att. 1: Memorandum to Robert Lohn, NMFS, from Jeffrey Lockwood, NMFS, Subject: Briefing for March 12, 2003 meeting to discuss NOAA Fisheries' comment letter for EPA Regional Water Temperature Criteria Guidance, summarizing status of issues needing resolution.	Attorney-Client, Deliberative

NO.	Date	Description	Reason for Excluding
110.	03/12/2003	E-mail to Jeffrey Lockwood, NMFS, cc: Robert C. Anderson, NMFS, from Thomas Hooper, NMFS, Subject: Re: briefing material for 3/12 temperature meeting, discussing internal process for review of attached letter and responding to 3/11/02 email from Lockwood to Lohn forwarding briefing materials for internal NMFS meeting to discuss draft NMFS comment letter on Temperature Guidance.  Redacted: See AR Document No. 236d.	Deliberative
111.	03/12/2003	E-mail to John Palmer, EPA, Robert C. Anderson, NMFS, and Russ Strach, NMFS, from Jeffrey Lockwood, NMFS, Subject: de minimus, seeking clarification regarding use of term "de minimus."	Deliberative
112.	03/11/2003	E-mail to Bob Lohn, NMFS, Mike Crouse, NMFS, Russ Strach, NMFS, Melanie Rowland, NOAA GCNW, cc: Robert C. Anderson, NMFS, and Michael Tehan, NMFS, from Jeffrey Lockwood, NMFS, Subject: briefing material for 3/12 temperature meeting, forwarding briefing materials re internal NMFS meeting to discuss draft NMFS comment letter on Temperature Guidance.  Att. 1: Draft briefing material document including summary of comments on 10/10/02 draft of Temperature Guidance.	Attorney-Client, Deliberative
113.	03/11/2003	E-mail to Stephen Zylstra, FWS, cc: Russ Strach, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: Assurance letter for EPA Regional Temperature Criteria Guidance, discussing Services' draft comment letters re Temperature Guidance and repeating legal advice from Melanie Rowland, NOAA GCNW, re same.	Attorney-Client, Deliberative
114.	12/10/2002	E-mail to Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, and Melanie Rowland, NOAA GC, NW, from Russ Strach, NMFS, re form of Service's comment letters, forwarding email from Stephen Zylstra, FWS, to John Palmer, EPA, cc: FWS staff, commenting on FWS position and seeking legal advice re comment letter.	Attorney-Client, Deliberative
115.	12/04/2002	E-mail to John Palmer, EPA, Russ, Strach, NMFS, Robert C. Anderson, NMFS, Dru Keenan, EPA, and Melanie Rowland, NOAA GCNW, from Jeffrey Lockwood, NMFS, Subject: Re: [Fwd: Electronic version of temp comments], containing legal comments re draft NMFS comment letter.	Attorney-Client, Deliberative
116.	11/25/2002	E-mail to Russ Strach, NMFS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, forwarding ("FYI") email exchange between Lockwood and Melanie Rowland, NOAA general counsel, discussing legal advice and review of revisions to draft NMFS comment letter on Temperature Guidance.	Attorney-client, deliberative
117.	11/25/2002	E-mail to Jeffrey Lockwood, NMFS, cc: Robert C. Anderson, NMFS, and Russ Strach, NMFS, from Melanie Rowland, NOAA GCNW, Subject: Re: temperature project letter, responding to 11/25 Lockwood email seeking comments on draft NMFS comment letter.	Attorney-Client, Deliberative
118.	11/25/2002	E-mail to Melanie Rowland, NOAA GCNW, Robert C. Anderson, NMFS, and Russ Strach, NMFS, from Jeffrey Lockwood, NMFS, Subject: temperature project letter, seeking legal comments on revised draft NMFS comment letter on Temperature Guidance.  Att. 1: "Predecisional Draft - 11-22-02 - Do Not Release"; draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002 Draft EPA Region 10 Guidance for Pacific Northwest States and Tribal Temperature Water Quality Standards, containing NMFS comments on Temperature Guidance (11/22/02 draft, includes Rowland comments).	Attorney-Client, Deliberative
119.	11/22/2002	E-mail to Jeffrey Lockwood, NMFS, cc: Robert C. Anderson, NMFS, from Russ Strach, NMFS, Subject: Re: here is highlight language, providing staff comments and questions on another staff member's proposed revisions to paragraph of draft NMFS comment/position letter on draft version of Temperature Guidance.	Deliberative
120.	11/22/2002	E-mail to Russ Strach, NMFS, cc: Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: here is highlight language, containing proposed revisions to paragraph of draft NMFS comment/position letter on draft version of Temperature Guidance (earlier version of language in Excluded Document #119).	Deliberative

NO.	Date	Description	Reason for Excluding
121.	11/20/2002	E-mail to David Arthaud, NMFS, Rachel Friedman, NMFS, Chris Looney, NMFS, Robert C. Anderson, NMFS, and Russ Strach, NMFS, from Jeffrey Lockwood, NMFS, Subject: water temperature project, discussing internal review process/providing comments on draft NMFS comment letter.  Redacted: See AR Document No. 243a.	Deliberative
122.	11/20/2002	E-mail to Melanie Rowland, NOAA, cc: Russ Strach, NMFS, Robert C. Anderson, NMFS, Rachel Friedman, NMFS, Chris Looney, and Marc Liverman, NMFS, from Jeffrey Lockwood, NMFS, Subject: [Fwd: temp guidance review], seeking legal review/comment on draft NMFS comment letter on Temperature Guidance.  Att. 1: "Draft - Incomplete - Do Not Cite or Distribute"; draft letter to John Iani EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002 Draft EPA Region 10 Guidance for Pacific Northwest States and Tribal Temperature Water Quality Standards (Revised: November 20, 2002; Printed: March 13, 2008), containing draft NMFS comments on Temperature Guidance.	Attorney-Client, Deliberative
123.	11/18/2002	E-mail to Rachel Friedman, NMFS, cc: Robert C. Anderson, NMFS, Chris Looney, NMFS, Thomas Hooper, NMFS, and Russ Strach, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: next draft temperature comments, exchange between NMFS staff members seeking clarification and responding to issues and questions regarding draft of temperature criteria and how criteria would be applied.	Deliberative
124.	11/15/2002	E-mail to Jeffrey Lockwood, NMFS, cc: Robert C. Anderson, NMFS, Chris Looney, NMFS, and Thomas Hooper, NMFS, from Rachel Friedman, NMFS, Subject: Re: next draft temperature comments, seeking clarification and raising issues re application of temperature criteria (see email above with Lockwood responses to Friedman questions).	Deliberative
125.	11/15/2002	E-mail to Robert C. Anderson, NMFS, cc: Rachel Friedman, NMFS, and Chris Looney, NMFS, from Jeffrey Lockwood, NMFS, Subject: next draft temperature comments, providing staff recommended revisions to and comments on draft NMFS comment letter on draft version of Temperature Guidance (10/10/02).  Att. 1: "Draft - Incomplete - Do Not Cite or Distribute"; draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002 Draft EPA Region 10 Guidance for Pacific Northwest States and Tribal Temperature Water Quality Standards (Revised: November 15, 2002; Printed: March 13, 2008), containing NMFS staff member revisions, suggestions, redline/str kethrough comments and inserted questions on draft of Temperature Guidance.	Deliberative
126.	11/12/2002	E-mail to Robert C. Anderson, NMFS, from Rachel Friedman, NMFS, Subject: more comments on the EPA document.  Att. 1: Draft comments on EPA's 9/10/2002 draft Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards, one-page list of staff member's suggestions, comments, and questions on draft version of Temperature Guidance.	Deliberative
127.	11/06/2002	E-mail to Russ Strach, NMFS, cc: Robert Anderson, NMFS, from Jeffrey Lockwood, NMFS, re review of temp section, providing brief staff comment responding to 10/10 email from John Palmer, EPA, containing new rough draft of section of Temperature Guidance and seeking comments.	Deliberative

NO.	Date	Description	Reason for Excluding
128.	11/06/2002	E-mail to Stephen Zylstra, FWS, Elizabeth Materna, FWS, and Shelley Spalding, FWS, from Robert C. Anderson, NMFS, Subject: Temperature Guidance, explaining status and forwarding draft copy of comments on NMFS comment letter re 2nd Public Review Draft of Temperature Guidance.  Att. 1: "Draft"; draft letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002 Draft EPA Region 10 Guidance for Pacific Northwest States and Tribal Temperature Water Quality Standards, containing rough draft of NMFS comments on draft version of Temperature Guidance.	Deliberative
129.	11/04/2002	E-mail to Robert C. Anderson, NMFS, cc: Thomas Hooper, NMFS, and Jeffrey Lockwood, NMFS, from Rachel Friedman, NMFS, Subject: comments on EPA draft temperature guidance, responding to and providing additional list of comments re 10/30/02 email from Anderson to Lockwood, cc: NMFS staff (comments on draft NMFS comment letter on 10/02 draft of Temperature Guidance).	Deliberative
130.	10/30/2002	E-mail to Jeffrey Lockwood, NMFS, Russ Strach, NMFS, cc: Chris Looney, NMFS, Rachel Friedman, NMFS, and Ed Murrell, NMFS, from Robert C. Anderson, NMFS, Subject: Comments on EPA Guidance for Pacific Northwest States and Tribal Temperature Water Quality Standards, forwarding and requesting comments on "first-cut draft" of NMFS comment letter on 10/10/02 version of Temperature Guidance.  Att. 1: "Draft"; draft Letter to John Iani, EPA, from D. Robert Lohn, NMFS, Re: October 10, 2002 Draft EPA Region 10 Guidance for Pacific Northwest States and Tribal Temperature Water Quality Standards, containing "first-cut" rough draft of NMFS comments on 10/10/02 draft version of Temperature Guidance (final comment on 10/10/02 draft provided at AR 239).	Deliberative
131.	10/10/2002	E-mail to John Palmer, EPA, Stephen Zylstra, FWS, and Robert C. Anderson, NMFS, from Russ Strach, NMFS, re review of temp section, responding to 10/10/02 email from Strach to Lockwood and providing comments/identifying issues needing clarification on draft passage of Temperature Guidance.	Deliberative
132.	10/10/2002	E-mail to Jeffrey Lockwood, NMFS, and Robert C. Anderson, NMFS, from Russ Strach, NMFS, re review of temp section, forwarding 10/10 email from Palmer to Strach and Stephen Zylstra, FWS, containing draft section of Temperature Guidance for discussion.	Deliberative
133.	10/03/2002	E-mail to John Palmer, EPA, cc: Robert C. Anderson, NMFS, and Dru Keenan, EPA, from Jeffrey Lockwood, NMFS re: Do Not Release - Preliminary Comments on 9/30 draft, providing commentary and identifying issues needing clarification re draft of Temperature Guidance.	Deliberative
134.	09/04/2002	E-mail to Shelly Spalding, FWS, cc: Elizabeth Materna, FWS, and Robert C. Anderson, NMFS, from Jeffrey Lockwood, NMFS, Subject: Re: lawsuit and NMFS letter, discussing issues and uncertainties re cold water refugia and interpretation of preliminary temperature monitoring data and forwarding draft FWS email comments on second draft of Temperature Guidance.  Redacted. See AR Document No. 248a.	
135.	08/13/2002	E-mail to Jeffrey Lockwood, NMFS, Robert C. Anderson, NMFS, Russ Strach, NMFS, Rachel Friedman, NMFS, and Ed Murrell, NMFS, from Melanie Rowland, NOAA GCNW, Subject: Re: beneficial uses, responding to request for legal advice (see 8/9/02 email from Lockwood to Rowland).	Attorney-Client, Work Product, Deliberative
136.	08/09/2002	Email to Melanie Rowland, NOAA GCNW, Robert C Anderson, NMFS, Russ Strach, NMFS, Rachel Friedman, NMFS, and Ed Murrell, NMFS, from Jeffrey Lockwood, NMFS, Subject: beneficial uses, seeking legal advice re ESA/CWA scope of authorities re beneficial use designations.	Attorney-Client, Deliberative

NO.	Date	Description	Reason for Excluding
137.	08/02/2002	E-mail to Robert C. Anderson, NMFS, cc: Russ Strach, NMFS, Jeffrey Lockwood, NMFS, Rachel Friedman, NMFS, from Ed Murrell, NMFS, Subject: Re: Regional Temperature Project Issues, providing short response to 7/31 email from Anderson to Strach, providing briefing and summary of informal discussion of temperature criteria issues with EPA staff member, noting that comments represented author's general concerns but were "not NMFS's definitive position."	Deliberative
62.	08/01/2002	E-mail to Bob Lohn, NMFS, Mike Crouse, NMFS, Russ Strach, NMFS, Jeffrey Lockwood, NMFS, and Patti Vandetta, NMFS, from Michael Tehan, NMFS, Subject: Temperature Project Briefing - internal briefing document for Regional Administrator discussing status of temperature guidance project and describing potential manner of soliciting scientific information regarding thermal refugia and identifying areas of uncertainty and issues needing clarification.  Redacted: See AR Document No. 258a.	Deliberative.
138.	07/31/2002	E-mail to Russ Strach, NMFS, cc: Jeffrey Lockwood, NMFS, Rachel Friedman, NMFS, and Ed Murrell, NMFS, from Robert C. Anderson, NMFS, Subject: Regional Temperature Project Issues, providing briefing and summary of information discussion of temperature criteria issues with EPA staff member (contained as part of email chain in Excluded Document No. 137.)	Deliberative
139.	07/24/2002	Early draft of briefing document (email to Bob Lohn from Michael Tehan, Excluded Document No. 62) containing staff member's redline/strike-through edits and inserted questions and commentary.	Deliberative
63.	06/14/2002	E-mail to Dru Keenan, EPA, Sally Sauter, USGS, Geoffrey Poole, Cornell University, Russ Strach, NMFS, and Robert C. Anderson, NMFS, Subject: briefing for NMFS regional administrator - discussing proposal for meeting to discuss issues related to thermal refugia.	Deliberative.
65.	[undated]	Draft of briefing document to Bob Lohn, NMFS, from Jeffrey Lockwood, NMFS, discussing status of temperature guidance project and describing potential manner of soliciting scientific information regarding thermal refugia and identifying areas of uncertainty and issues needing clarification (earlier draft version of Excluded Document No. 62, including redline/strikethrough comments and handwritten notes).  Redacted: See AR Document No. 258a.	Deliberative.
142.	06/13/2002	One-page memo to Jeffrey Lockwood, NMFS, from Russ Strach, NMFS, Subject: per your request, Lohn's Bullets 06-02 (same as Excluded Document No. 64, slightly different formatting).	Deliberative
146.	03/25/2002	Early draft of letter to Randy Smith, EPA, from Michael Crouse, NMFS, attached to NMFS draft comments on draft of Temperature Guidance.  Att. 1: Draft of NMFS comments on Public Review Draft Guidance For State and Tribal Temperature Water Quality Standards National Marine Fisheries Service, Northwest Region; early draft of comments on October 2001 Public Review Draft of Temperature Guidance - note: these comments were never finalized or circulated outside of NMFS (see Excluded Document No. 144).	Deliberative
147.	03/22/2002	Notes by unidentified author regarding ground water exchange and cold water refugia.	Deliberative
148.	03/22/2002	Early draft of letter to Randy Smith, EPA, from Michael Crouse, NMFS, attached to NMFS draft comments on draft of Temperature Guidance.  Att. 1: Draft of NMFS Comments on Public Review Draft Guidance For State and Tribal Temperature Water Quality Standards National Marine Fisheries Service, Northwest Region; early draft of comments on October 2001 Public Review Draft of Temperature Guidance - note: these comments were never finalized or circulated outside of NMFS (see Excluded Document No. 144).	Deliberative
149.	01/16/2002	Draft joint letter to Randy Smith, EPA, from Cynthia Barry, FWS, and Michael Crouse, NMFS, Re: Comments on draft temperature guidance (10/31/01 draft).	Deliberative



NO.	Date	Description	Reason for Excluding
150.	12/26/2001	Memorandum to Russ Strach, NMFS, Rachel Friedman, NMFS, and Ed Murrell, NMFS, from Jeffrey Lockwood, NMFS, Subject: December 20, 2001 meeting of Policy Workgroup for EPA temperature project, containing summary for internal briefing purposes of pre-meeting of Services and Policy Workgroup and expressing author's impressions of issues raised at the meeting.	Deliberative
151.	12/26/2001	E-mail to Ed Murrell, NMFS, Russ Strach, NMFS, and Rachel Friedman, NMFS, from Jeffrey Lockwood, NMFS, Subject: EPA Temp. Proj., Policy Wkgrp Mtg 12-20-01, attaching memorandum and outlining plan to move forward with drafting NMFS comments on draft Temperature Guidance.  Att. 1: Memorandum to Russ Strach, Rachel Friedman, and Ed Murrell, from Jeffrey Lockwood, Subject: December 20, 2001 meeting of Policy Workgroup for EPA temperature project (see entry above).	Deliberative
152.	11/15/2001	E-mail to Jeffrey Lockwood, NMFS, and Russ Strach, NMFS, from Rachel Friedman, NMFS, Subject: Comments on USFWS letter; staff member's comments and questions regarding draft NMFS comment letter and draft temperature guidance and seeking clarification on issues related to temperature criteria and application of guidance.	Deliberative
153.	10/01/2001	Jeff Lockwood's handwritten comments on draft flip chart notes from September 26, 2001 Technical Workgroup Meeting.  Redacted: See AR Document No. 270a.	Deliberative
154.	07/18/2001	Draft Table of Temperature Guidance Options, reflecting NMFS comments and questions regarding various potential temperature criteria related to draft version of Temperature Guidance and how various criteria could potentially facilitate ESA section 7 consultations, for internal NMFS discussion purposes; unidentified author.	Deliberative

**B. EPA Documents**

NO.	Date	Description	Reason for Excluding
155.	03/31/2003	E-mail to Jeffrey Lockwood, NMFS, cc: Robert C. Anderson, and Russ Strach, NMFS, from John Palmer, EPA, Subject: Re: Moving forward, responding to 3/31 email from Lockwood to Palmer discussing Palmer comments on draft NMFS position/comment letter on final Temperature Guidance related to essential fish habitat.	Deliberative
156.	03/26/2003	E-mail to Jeffrey Lockwood, NMFS, cc: Robert C. Anderson, NMFS, Russ Strach, NMFS, and Stephen Zylstra, FWS, from John Palmer, EPA, Subject: Draft NMFS letter, containing comments on draft NMFS position/comment letter.  Att. 1: "Predecisional, Internal Deliberative Document, Attorney-Client Privileged"; draft letter to John Iani, EPA, from D. Robert Lohn, Re: October 10, 2002, draft EPA Region 10 guidance for Pacific Northwest state and tribal temperature water quality standards. (March 13, 2003, redline/strikethrough comments by J. Lockwood)	Deliberative
157.	03/24/2003	E-mail to Jeffrey Lockwood, NMFS, cc: Ed Murrell, NMFS, Robert C. Anderson, NMFS, Russ Strach, NMFS, and Thomas Hooper, NMFS, from John Palmer, EPA, Subject: Re: warm conditions, responding to 3/21/03 email from Lockwood to Palmer discussion proposed changes to portion of draft Temperature Guidance to discuss warm weather conditions and discussing process for revising and reviewing draft guidance.	Deliberative
158.	03/19/2003	E-mail to Jeffrey Lockwood, NMFS, from John Palmer, EPA, Subject: Re: warm conditions; email discussion/seeking clarification re warm conditions and relationship to TMDLs in application of Temperature Guidance.	Deliberative
159.	03/12/2003	E-mail to Jeffrey Lockwood, NMFS, cc: Robert C. Anderson, NMFS, and Russ Strach, NMFS, from John Palmer, EPA, Subject: Re: de minimus, discussing definition of "de minimus" as used in Temperature Guidance and responding to 3/12/03 email from Lockwood to Palmer re same.	Deliberative

NO.	Date	Description	Reason for Excluding
160.	03/11/2003	E-mail to Russ Strach, NMFS, Stephen Zylstra, FWS, Jeffrey Lockwood, NMFS, Elizabeth Materna, FWS, Shelley Spalding, FWS, and Jim Muck, FWS, from John Palmer, EPA, Subject: Final Draft of Temp Guidance, forwarding near-final draft of guidance for review and comment, outlining areas of guidance still subject to revision, and discussing plans for inter-agency coordination to finalize guidance and Services' comment/position letters on guidance.  Redacted: See AR Document No. 277a.	Deliberative
161.	02/26/2003	E-mail to Jeffrey Lockwood, NMFS, from John Palmer, EPA, Subject: Re: temperature project, discussing rewrite of two sections of Temperature Guidance re use designations and responding to issues raised by NMFS staff member re same.  Att. 1: Possible edits to two different sections of the guidance - 2/26/03 (redline/strike-through edits to draft sections of Temperature Guidance).	Deliberative
162.	06/13/2002	E-mail to Jeffrey Lockwood, NMFS, from Dru Keenan, EPA, Subject: Re: [Fwd: per your request], continuing email discussion re temperature issues related to cold water refugia; email chain includes email from Lockwood to Keenan (6/13/02) with briefing points, discussion of plan to hold presentation to gather additional information re cold water refugia, and response from Keenan with "some thoughts" related to the questions raised.	Deliberative
163.	03/21/2002	EPA's Temperature Guidance - NMFS, EPA, and FWS Discussion, March 21, 2002, by unidentified author, one page summary of "major" elements of draft Temperature Guidance and "next steps".	Deliberative
164.	01/05/2000	E-mail to Jeffrey Lockwood, NMFS, from Dru Keenan, EPA, Subject: Re: Meeting Notes - Temp. Tech. Comm., responding to email from Lockwood to Keenan and NMFS staff discussing composition of workgroups.	Deliberative
165	[undated]	Draft section of Temperature Guidance (Tables 3 & 4 and associated discussion) with highlighting and extensive handwritten notes ("Date Unknown, EPA Author").	Deliberative